

COLONEL THOMAS L. LIVERMORE
Member of the Corporation

technology review

Published by MIT

This PDF is for your personal, non-commercial use only.

Distribution and use of this material are governed by copyright law.

For non-personal use, or to order multiple copies please email
permissions@technologyreview.com.

The Technology Review

Published at Cambridge "A" Branch, Boston, Mass.

ROBERT E. ROGERS, *Editor*, Massachusetts Institute of Technology, Cambridge, Mass.

VOL. XX

JANUARY, 1918

No. 1

THE ALUMNI DINNER

An Impressive and Notable Occasion in the Walker Memorial The President's Prophetic Speech

The 1918 Alumni dinner of Technology was notable for several reasons. First, because it was the first ever held in the new Walker Memorial, which, brave with class banners and cardinal and gray decorations, held a far larger number than the inclement night had led any one to expect. And second, because for the first time since the Supreme Court had announced its decision settling the status of the "McKay millions" the President made a public statement touching upon it. In the course of his remarks on the death of Colonel Livermore, long time member of the Corporation, President Maclaurin made plain his belief that unless there cease to be competition and duplication between our great educational institutions the traditional New England supremacy in education must inevitably pass from us. We must choose, said he, between serving a section and serving a nation or the world, and in our choice will be settled many other problems beside the McKay problem. He finished with a warm welcome to the distinguished guest of the evening, the Chinese Ambassador, Dr. Wellington Koo, who looks like a boy and makes a speech like the American college man he is.

In his introductory remarks President Francis R. Hart, '89, of the Alumni Association, made humorous capital out of the fact that the enterprising Alumni newspaper, *The Tech*, had already distributed to the diners complete copies of his speech with a history of his life, including his activities as an undergraduate.

The dinner was very simple, he explained, as part of the money taken in went to pay for the invitations extended to the Tech-

nology men, graduate and undergraduate, already in the service, who were near enough to Boston to accept for the evening. There was a large delegation present in uniform from both the Army and the Navy. The heads of the resident schools for Army and Navy Aviators were also present, at the head table. Mrs. Maclaurin and the Alumnae occupied tables at the front of the hall. George Glidden, '93, directed, as usual, the music, which was loud and long.

Following the dinner, the moving pictures of the summer military camp at East Machias were exhibited and showed to very good effect the work and play of the young soldier engineers.

Mr. Hart's address had two principal themes, the achievement of the desire of many years in the existence of the Walker Memorial, and second, the war services of the Alumni. "After years of mingled hopes and discouragements our dreams have become a fact greater and nobler than our fancies ever pictured, the Walker Memorial is happily finished and we have foregathered in its great hall. You undoubtedly remember that American Indian who said, when asked why he stood silent in the face of a great joy, 'The White Man has a head, therefore he speaks with his tongue; the Indian has a heart, which cannot speak.' So it is with us today, our hearts do indeed feel joy and pride in the achievements of our loved mother, the Institute:

"We are in the midst of the greatest human upheaval the world has ever known, and it is more in keeping with our traditions to work and not to talk . . . but to you I will briefly report on behalf of the Alumni Council, on the year's work, as it is proper to do at this, the annual dinner."

Mr. Hart noted how his predecessor, Mr. Stone, had appointed an Alumni committee charged with the duty of mobilizing the resources of Technology, for the expected opportunity of national service if the country entered war. The foresight which prompted the naming of this committee was made evident early in the war. The work of setting the house in order for the great task of the war was ably seconded by a committee appointed at the Cleveland convention of the Technology Clubs Associated. This committee under Smythe, '89, established the Washington Bureau, and later came the happy union of the two committees in the M. I. T. Committee on National Service.

The president of the Alumni gave full praise to the Alumni

through whose patriotic and unstinted work progress was possible, Litchfield, '85, Munroe, '82, and Scharff, DeBell and Ferris among the later classes, who have combined to make the Washington Bureau one of the most effective instruments in the Alumni work. "Munroe's enthusiasm and driving force, combined with the money help of an always generous friend of the Institute and the self-sacrifice of Van Rensselaer Lansingh, made the Technology Club of Paris a possibility, and from the modest beginnings of our little club there has developed the American University Union in Paris. . . . In this University Union your National Service Committee is keeping up a Technology bureau, which under the direction of volunteers from this Association will be of the most intimate help to all Tech men."

In continuing the story of Alumni helpfulness, Mr. Hart told how the Association has aided the undergraduate paper, *The Tech*, to become for the war period an alumni as well as an undergraduate newspaper of almost professional merit, and how it should be in the hands of every alumnus. He noted that "Litchfield, called to Government service, was obliged to give up his position as editor of the REVIEW, in which he had done so much to make the magazine one of the very best of its type in the country. For his successor the Council is happy to have secured Prof. R. E. Rogers of the English Department of the Institute. The same reasons caused Mr. Litchfield's resignation as Field Secretary. The position has not yet been permanently filled, but the Council recognizes it as one of its most important duties to keep the outlying Technology groups and associations in closest personal touch with the Institute. This has been possible in a measure this year through the kindness of Professor Pearson, who made in the summer an extended tour, of Mr. Ritchie, who has visited Buffalo and Rochester and of Professor Allen, who is to start in a few days on a long trip touching nearly every association between Albany and Kansas City and south to the Birmingham meeting, the whole including some seventeen Tech clubs.

"One other important undertaking has been most successfully established," continued Mr. Hart, "the War Service Auxiliary of the National Service Committee, M. I. T., a committee of devoted women, with Mrs. Cunningham as chairman, who are maintaining headquarters and workrooms in the Rogers Building and carrying on in a multitude of ways those helpful and sympathetic services

needed, and to be even more needed later, by men at the front and their families and dependents here."

The address made reference to financial matters of the year, noting among other matters how increased support of the War Service will enable it to extend a much-needed work and to prepare it to meet the emergencies that are sure to come.

In conclusion, President Hart turned again to the Walker Memorial. "No more fitting dedication of this building could have taken place," he said, "nor one more appropriate to the great-hearted soldier and educator, to whose memory it is actually inscribed, than the act of turning it over for the war period for a military barracks."

PRESIDENT MACLAURIN'S ADDRESS

The one subject for serious thought and for serious action today is the war. As a nation, mainly through our President, we have made admirable and helpful contributions to what may be called its philosophy, but we are still far from supporting that philosophy by appropriate action and it is incumbent on all individuals and institutions not to sit back and criticize, but to get into the business and help. Since the outset Technology has been "doing its bit" and as time goes on its contributions are steadily increasing in magnitude and significance and I hope of course that this will continue until the end. I will not impose upon your patience by enumerating the various activities of Technology associated with warlike ends. They have been set forth in some detail in various publications of the Alumni Association. Large numbers of men are going forth from the Institute almost daily to the service of their country and of humanity to play their part in this great crisis of the world's history. They go out in all cases that I have observed with admirable spirit and it is this spirit of our young men that is the most cheering fact in the outlook today where there is much that is discouraging. If only they can get into effective action in time, and if only history will not have to write "too late" on America's action as, according to Lloyd George, it must write with regard to some of the activities of our Allies, we need have no misgivings as to the outcome. As I see these young men going forth, I think of the part that they are to play in the great conflict and of the influence of their service on the history of the world. I think, too, of the contributions that they will make in

later life (if they come scathless through the present trial)—of the contributions they will make to the power and usefulness of this great institution—and I wonder if many of them are destined to play as great a part in its development as were some of those who gave themselves with like enthusiasm to the cause of humanity in the great war of '61. It is strange that the two most critical steps in the Institute's history should have been taken on the eve of a great war. Only a little more than a year ago we occupied these new buildings, and by occupying them greatly increased our opportunities for usefulness. Without the facilities that are now available, practically all the services that we are now rendering to the Government would have been impossible. We could not have improved our equipment more opportunely than we did. The other critical step was the actual foundation of the Institute, the first step that cost so much. The charter of Technology was signed by Governor Andrew only a few days before the outbreak of the Civil War and, as I have said, not a few of those who played a conspicuous part in that war were destined to shape the course of Technology in later years. The chief of these was General Walker—that great president of this Institute often spoken of as its second founder,—a man who by his qualities of mind and heart won the affection and regard of all with whom he was associated and whose memory has been built into stone in this noble Walker Memorial, dedicated in his honor by the Alumni of Technology.

Only yesterday I stood before the grave of another hero of the Civil War, who played an important part, though less conspicuous in the history of Technology, Colonel Livermore. He was only a lad of seventeen when the war broke out, but his capacity and character made him a colonel at twenty. This is not the appropriate place to estimate his value to the community or to speak of his contributions to knowledge, of his great and honorable business career or of his unique social charm. His services to the Institute, however, may well be touched on here. He was fighting for liberty when the Institute was founded, so that he was not an alumnus of Technology, but no alumnus could have been more loyal to his Alma Mater nor given himself more unsparingly to the advancement of its interest. For more than a generation he has been a conspicuous member of its Corporation and for a large part of the time a member of its Executive Committee. How much he thought about it and how much interest he displayed in all its larger

problems none can know save those who, like myself, were intimately associated with him in the conduct of its business. Probably to most of the Alumni his name is most conspicuously associated with the controversy that arose over the so-called "merger" with Harvard University that was proposed in 1904. He was strongly opposed to the plan then formulated and fought it, as a gallant soldier, vigorously but without a touch of bitterness, so that he retained the respect and admiration of those who favored the plan as well as those who shared his views.

Happily there was no similar controversy over the arrangement made three years ago for coöperation between Harvard and the Institute. He was most intimately associated with the negotiations that preceded that agreement and it was he that moved its adoption by the Corporation of the Institute.

In the closing days of his life he was very much interested in the problems presented by the recent decision of the Supreme Court practically annulling the agreement of three years ago. When that decision came up for discussion in the Executive Committee of the Corporation, he analyzed it carefully and reached the conclusion that there was nothing in the decision that barred the way to other forms of effective coöperation. More than that, he was earnest in his advocacy of the view that the condition of education in this country, and in particular the grave educational problems that would be presented after the war, demanded the building up of a great school of applied science in this community that would be national in its scope and influence, and he believed that such a school could be developed far more effectively by coöperation between Harvard and Technology than by either acting independently. In the very last conversation that I had with him he dwelt earnestly on this matter, emphasizing his favorite topic, that an engineering school to be really effective must be permeated with a professional spirit. Only a week ago he sent me a draft of a scheme for coöperation between the two institutions that would, in his judgment, overcome the objections indicated by the court to the former agreement and be perhaps equally effective as a working basis for action. With characteristic modesty he said, "I send you this outline for what it is worth, but with no pride or paternity." The former plan, he remarked, had this great merit, that it not only looked as if it would work well, but actually did work well. He took occasion to point out also that Technology

need no longer have any fear of being swallowed. As he put it, "An institution with such a record of achievement, with such a backing from its Alumni and with twenty millions of assets, can't be swallowed, and no one would think seriously of making the attempt." Full of years and honors and while apparently still vigorous, he has gone. His place will be impossible to fill, but the record of his loyalty to Technology will long remain as a stimulus to others on whom the burden of leadership will fall.

As to the Institute itself, the great issue is whether we shall enlarge or contract, whether we shall become more provincial or more national, whether we shall strive to serve a particular section or the whole nation and to some extent the whole world. I do not believe that you will have much doubt as to which direction we should choose, but aspirations are useless things unless they lead to accomplishment, and we cannot render world-wide service either in education or in war merely on the basis of good will and intention. We must devise the means to the desired end. The largest question is undoubtedly that of our future relations with Harvard. Both institutions have a great record of achievement, Harvard incomparably the greater, if we survey the whole field of education, but not greater in the particular field that the Institute has cultivated. Each institution is strong enough to play an independent part and there will doubtless be some who will advocate that course. Before settling the matter, however, we should observe carefully the broad current of education and not forget that there are many forces tending to divert the stream of influence from Boston and New England. This section has lost its supremacy in the realm of commerce and it may lose it in the realm of education, too. Indeed, I believe that it will inevitably lose it if it dissipates its energies and scatters its forces. Its greatest asset is its record of achievement and its tradition of high purpose and exalted aim. Let us continue to aim high. If we do so and are properly supported we can build up in this community one of the very greatest, if not the greatest, centers to be found anywhere in the world of science, pure and applied, for the two must go together,—a center of scientific influence that will profoundly affect the future of this country and indeed of the world.

From every State in the Union students come in numbers to the Institute and every State receives its graduates, and this influence extends far beyond the limits of the country. Every year some

forty foreign countries send students to this Institute and the ratio of foreign students here is more than twice as great as that in any of the old universities in the land. It is no insignificant thing that there are between forty and fifty Chinese students at Technology today and that for several years a similar number have come here to represent the great republic of China on whose development along sound lines the happiness of so large a fraction of the human race depends. We should be proud in taking part in the development of that great republic. And we are proud tonight to welcome its distinguished representative in the person of His Excellency, the Chinese Minister.

In presenting Mr. V. K. Wellington Koo, Chinese Minister to the United States, Mr. Hart referred to his college training and diplomatic service, graduation by Columbia in 1906, honorary degree of LL.D. by Yale and Columbia, two years ago and one year ago respectively, and his service as English secretary to President Yuan Chi Kai. He was sent to Mexico as Chinese representative in 1915, almost immediately was charged with a special mission to England and while in England was made Minister to the United States.

Minister Koo with Oriental polish praised this country and acknowledged the honor of the invitation for the evening. He referred to the strenuous nature of a journey in this country, noting that in thirty hours he had already made two addresses.

Mr. Koo expressed the enormous debt of China to American institutions of learning, saying that to no one of them does it owe more than to the Massachusetts Institute of Technology. Many young men are educated within the walls of this school and on going back to their native country become apostles of reform and prophets of progress.

“I admire the spirit of Technology,” he said, “the nursery of so many young Chinamen who are to mold the destinies of material and spiritual China. We are grateful for what your school has done for our young men. Through the students the American people have learned of China, and the students, themselves, have become inspired with American ideas and ideals.”

Mr. Koo spoke of the debt of his country to the act of “that great statesman, John Hay,” who, through his generous and unprecedented policy in remitting the Boxer indemnity, gave to Chinese young men the possibility of coming to the United States.

By that action modern China has benefited, and it has been the means of cementing strongly the relations between the two countries.

This spirit of coöperation has been dominant in another matter, namely, the entrance of China into the war. It was on the advice of the United States that China protested against the ruthless methods of warfare. China decided that there was no other way left but to enter the war.

"Democracies are ill prepared for war," continued the speaker, "but the earnestness of purpose of the United States has called forth the admiration of China. We are in the war, too, and taking from the book of American experience, we can speed up our preparations and China can really help win the war."

There is more than ordinary significance to be attached to the coöperation between China and the United States. The warring nations are numerous and include three-fourths of the world's population and the major part of its resources. In this dreadful struggle the spirit of China is towards the world's democracy. With the telegraph and the telephone the world is a smaller world; the idea of world dominion has outlived its day, and any nation asserting supremacy is the common enemy of all. The quality of state must be more than international law. This quality must be a guiding principle and this principle must be so honored as to be placed beyond cavil or doubt.

"History has repeatedly shown," said Minister Koo in his concluding phrases, "that the tide of civilization cannot be turned back. Stronger nations than Germany and Austria, with greater men for their rulers, have tried and failed. Civilization will remain. The longer its flow is checked, the greater the certainty that he who obstructs it will be submerged and swept away. The fundamental question lies between brute force and righteous liberty and there can be but one outcome. Just as the American Revolution resulted in an independent United States; just as the Chinese Revolution overthrew the ancient Chinese dynasties; just as the Russian people have set aside the Czar, so must democracy triumph over autocracy."

The contribution of Alfred L. Aiken, president of the National Shawmut Bank, was the very practical one of setting before the people in popular language the fundamental necessity of economy by citizens of the United States. It was an address that hit the

nail on the head by showing just what the situation is. It was aimed at one of the prime difficulties, the time necessary for a great nation to change its standards and realize what the new ones mean. A year ago the people of this country thought in millions for maximum figures; in nine months the standard has become billions.

"When we stop to think," said Mr. Aiken, "that Congress has appropriated for the expenses of this fiscal year the sum of \$19,000,000,000, more than three times as much as the actual amount of money existent in the country today, we put into more graphic form the magnitude of our undertaking. About one-third is for loans to our Allies, but this does not relieve us of the necessity of providing all the credit here in this country. There are only two ways in which this financial demand can be met, one by taxation, and the other by an expansion of credit involving tremendous inflation. We dislike to use the word inflation, when speaking of things financial, but it is a necessary concomitant of war and is a situation that it is better frankly to face. No burden of governmental financing has ever been taken by any country in the world but means must be found to raise the vast sums, for failure to do this means failure in our conduct of the war."

Mr. Aiken showed how the problem of caring for the vast loans is in the last analysis a problem of savings, because in no other way can the loans be liquidated. Unfortunately for us, we have the problem intensified, because we are not a thrifty or saving people. The problem is, therefore, not merely that of educating the people to subscribe to Government obligations, but in fullest measure to teach them the strange ways of practicing thrift and economy.

"No one can fail to believe that these problems are going ultimately to be satisfactorily met," said Mr. Aiken in conclusion, "and it is certain that the experience is going to bear fruit, for our cultivation of the habits of thrift will ultimately exercise a tremendously beneficent effect on the whole social-economic development of the country that we all honor and love."

THE PRATT SCHOOL

The promised school for naval architects to be
speedily a reality

In the belief that it is a patriotic duty, the Institute is at this moment engaged in the preparation of the working plans for the Pratt School of Naval Architecture and Marine Engineering, and very soon the contracts will be signed and construction begun. This means that another magnificent structure will be placed in the group on the bank of the Charles, a memorial to members of his family by the gift of Charles Herbert Pratt.

Mr. Pratt created a trust which should care for his property until its amount reached three-quarters of a million, whereupon it was to be paid to the Institute, which is directed to build a suitable structure and maintain the school above named. Only a few restrictions hedge about this gift: the building must be substantial according to plans and specifications approved by the trustees, and the portion of the fund not used for building is to support through its income "the Pratt School, which is to be forever devoted to the education and training of such young men of all classes in life as may seek instruction in naval architecture and marine engineering."

The time has now come for the fulfilment of this project. The trustees, Arthur C. Thomson, Joseph Cavanagh, and Theodore H. Raymond, have performed their work most admirably. The estate proved even better than Mr. Pratt had hoped and was well cared for by the trustees. There was some litigation in opposition to the will, but the decision was in favor of the Institute. The testator provided that the trustees should hold the funds until the amount of seven hundred and fifty thousand dollars had been reached, believing it might require considerable time. But in the later years of his life his holdings improved in value so fast that his limit was reached by the time litigation had ceased. As a matter of fact, the Pratt fund stands today at \$925,000, and practically realizes the dream of Mr. Pratt's young manhood, that he might be able "to give a million to the Massachusetts Institute of Technology."

By the time the trustees were ready to turn over the fund to the Institute, the wave of high cost of living was upon the country. The contracts for the major portion of the great educational structures were placed on a low market so that even with the increases of the past two years the cost did not materially exceed the estimates of four years ago. But to the financial managers of the Institute it seemed undesirable to begin the construction of the great Pratt School under existing conditions of building materials and labor. Prudent policy, proper principles of economy, and the best interests of all concerned seemed to point to some delay until conditions more normal had been established. In accordance with this idea it has been stated that the construction of the Pratt School would be delayed.

Since this decision was reached, war with Germany has been declared and the Institute sprang instantly into relations of helpfulness to the United States Government. It gave the use of its laboratories, lent members of its faculty and instructing staff, organized Government schools of aviation and navigation and marine engineering, and entered into a score of other activities. Great importance at once attached to the work of the department of Naval Architecture, for it brought to the aid of the country numbers of young men technically trained in ship-designing. When war was declared, the students in naval architecture practically melted away. Within a week or two every one of them was called to some position in the navy yards or shipyards, places in which their training would be of instant value. And some of the instructing staff went too, one of these men, it is rumored, being very high in the Government departments looking after the construction of Government vessels.

An intensive course with the purpose of making naval draughtsmen out of the seniors in other courses at the Institute afforded in a few weeks of special work a very important group of students who had completed their four years at Tech, and these men were whisked away to the navy yards immediately after the completion of the special work, with hardly time enough between to pack a suitcase. The instant value of these men for practical work was an important factor in causing the corporation of Technology to decide on the construction of the Pratt School at once. It is now conceded that the war is likely to last for some years, and this gift of a generous Boston man to the cause of education is potentially

of enormous value. "It is a duty to our country," was the thought of members of the corporation, and without delay word was given to get under way.

The gift of three-quarters of a million came from a clear sky. No one at the Institute was acquainted with Mr. Pratt, and the head of the department of Naval Architecture, Prof. C. H. Peabody, had met him only once. It is therefore of greatest interest to know that he was influenced by the manly bearing of the students as he saw them on the streets about the Rogers and Walker buildings, in the early days of the Institute.

Mr. Pratt's father was Eleaser Franklin Pratt, direct descendant of Phineas Pratt who came in the *Mayflower*. He was an old-time merchant of Boston in the paint and oil business, one that is flourishing today as the Carpenter-Morton Co. On his death in 1888 the family took up residence in Hotel Bristol, the second apartment house to be built in Boston. From the bay window looking out upon Trinity Church, the young men—for Charles H. Pratt had a brother, Franklin S.—evolved their dream of doing something for the students of the Institute.

The place in its estate that the Institute is reserving for the Pratt School of Naval Architecture is on Massachusetts Avenue, adjoining the buildings now devoted to Civil Engineering, in the most prominent position on that side of the structural group where there is the greatest travel, where it will attract the most attention and where the classic lines of the new school building will form the dominant feature of the long facade. It will be on what has been termed "the gateway to Cambridge," the principal route of those people interested in education to the city of colleges, and cannot be missed by any passerby.

Externally the Pratt School will be in harmony with the buildings already erected by the Institute. It will be in the same cream limestone and will carry out the same pilaster form of treatment, the same splendid windows that are so marked a feature in the structure, everywhere affording what experts are agreed is a marvellously effective means of lighting the interior, and the same attic above the entablature pierced with its square windows. In Mr. Bosworth's plans for making the building distinctive, a striking feature will be the treatment of the central panel. Here the main entrance to the school will be placed, a noble doorway approached by stone steps to attain the level of the floor above

street grade. The pilasters strengthened serve to support at the entablature a series of four majestic figures which carry a massive base whereon is to rest a trireme galley or other vessel of antiquity carved in stone in full relief.

In the metopes between the figures, there will be space for three inscriptions, and here it may be that the simple conditions of Mr. Pratt's gift relating to tablets may be fulfilled. This phrase of his will reads, that the building shall have inscribed on its outer walls the name, "Pratt School of Naval Architecture and Marine Engineering," and that a suitable bronze tablet bearing the inscription, "Presented by Charles Herbert Pratt to the loving memory of Eleaser Franklin Pratt, Catharine Blake Pratt and Franklin Stetson Pratt," be placed in some appropriate place in the interior of the building. It is the first-named condition that the spaces above the entrance will afford the means for fulfilling.

It is still too early to say much about the disposition of the interior of the Pratt School building. There will be drafting rooms, one 100 feet by 50, for the school in general and two smaller ones, half this size, one of them for the United States naval constructors, who by law are required to come to Tech for the finishing touches to their education. Then there will be class and study rooms, offices for the instructing staff, halls for the library and the museum, and a well-equipped modelling room, since no small portion of the work here is in the making and testing of models, which may be of ships, of ship screws or of aeroplane propellers. A shop for handling the material and putting it roughly into form and a paint shop are other utility rooms.

Whether there will be a towing tank in the basement is still under discussion. It means a considerable cost, \$50,000 or more, including the equipment, and there are already in the country the very complete one in Washington and that of the University of Michigan, which while restricted in its field has done most excellent work in the lines for which it is adapted. A towing tank is not to be carried about under the arm or stowed away in any out-of-the-way corner, for from end to end it ought to measure about four hundred feet. The School will measure along the Avenue some two hundred and fifty feet, but adjoining basements may be requisitioned in case the tank is approved by all concerned.

Charles Herbert Pratt quietly pursued his profession of the law,

so quietly that no one had any idea of the breadth of his views or the scope of his information. It is today the wonder at Technology that he was able to sense so clearly one of the needs of the Institute and that he was able to judge so clearly its requirements. Naval architecture is not a study that is specially picturesque nor are the names of the important experts famous, so that a list of the graduates would mean little to the popular world. But that it is a fundamental study to the safeguarding of the nation has become strikingly evident in the present emergency. The study in normal times has not the attractions of chemistry, electricity or mechanics, but it is vital to the country that it have at call a group of trained naval architects, and this comparatively small company (in manufactures it would be termed a "key industry"), has been furnished very largely by Technology. The courses have been costly to maintain but the Institute has recognized the fundamental principle that trained men must be supplied in advance of the demand for them. So with patriotic spirit that sought to do its best service for country, state and citizen, a spirit that is not born today but has been maintained for a quarter of a century in the past, Technology has maintained at large cost its School of Naval Architecture.

Gen. Francis Amasa Walker, soldier, educator, economist, at the time president of the Massachusetts Institute of Technology, saw the service that would be rendered by this course. There was an opportunity for the students to hear Everett Burgess on ship construction, and General Walker thought it would be well to have the young men posted on some of the fundamental principles, so he asked Professor Peabody, then in the department of Mechanical Engineering, to give the boys some preparatory talks. This Burgess address led to a series of lectures by Naval Constructor Woodward in 1891, and this may be considered the beginning of serious work in this line.

The course in Naval Architecture and Marine Engineering, as it is officially termed, was authorized in 1893, graduated its first class in 1895, and since that time has been "plugging along" with that quiet energy that characterizes Institute work, and has turned out six to eight students a year. This means that more than one hundred well grounded naval architects are alumni. In 1901, the United States Government saw the value of the courses and by Act of Congress all the naval constructors graduated at Annapolis

must take two years under Professor Peabody for the finishing touches. Foreign nations also found out the quality of the school, and as early as 1906 Japanese began coming to this country. These, like most of the students here from that country, were mature men, masters already of all the knowledge that the schools, general and special, of their own country could furnish. Today the Japanese are returning to Professor Peabody's courses for advanced work in aerodynamics and aeroplane construction. In later years the Chinese have followed in the footsteps of Japan, and their young men have studied here first naval architecture and in the last four years, the aeroplane.

At the present moment Naval Architecture is the guest of Mechanical Engineering at Technology. When three years ago the corporation scented the financial stringency that followed, it was deemed wise to curtail some of the structural work. One of the items so curtailed was the testing of materials laboratories. These were installed in one of the structures now finished and caused some crowding, so that Naval Architecture finds itself in small class and drawing rooms. They are crowded at this time and the possibility of larger classes is out of the question. But on the other hand, the school realizes that upon it devolves the duty of training naval construction men for the future. It is now generally believed by the faculty of the Institute that the war will last three or four years yet. There will be time before the end comes for the Institute to take larger part in the fitting of men for the special work of naval architecture. It seems a patriotic duty to defer no longer the beginnings of the new constructions so that the classrooms and laboratories may do their fullest share towards helping the allies win the war. In this Technology lives up to the spirit that has actuated its score of movements of national helpfulness.

What has been done in the past is a guarantee of what may be done in the future, and in this laboratory work of the Institute is notable. Half a dozen years ago there was the *Froude*, and a while later the *Fulton*, both model boats, in Charles River basin. Both were floating laboratories fitted to measure accurately every factor entering into the value of the type of boat. The *Fulton* was a little tugboat which demonstrated the most efficient hitches in towing and upset the established notion that towboats must be built of wood. The *Froude* accomplished

a lot of work, the most striking outcome being that screw steam-boats in general carry their propellers in the wrong place. Out of this experiment it is possible to develop more scientific methods of equipment.

There is one other matter that shows the excellent business sense of Charles H. Pratt, namely, that he fixed on \$750,000 for the amount of his fund before it could be used. While he dreamed always of giving his million, he probably realized, when he wished to define the nature of his gift, that he was somewhat short of that sum. He must have realized also, that many worthy intentions are wrecked by gifts too small to accomplish their intended purposes. His three-quarters of a million could hardly be better figured were he an expert in the business, for it would normally have provided for a dignified building for the school, the maintenance of the needed instructing staff, the carrying on of laboratory work, and the proper assembling and care of the all-essential library.

Today the plans for this splendid memorial are under way. It will be but a short time when the contracts will be let, and this princely gift will in all probability be in time to be of actual service to our country in its efforts to end by victory this monstrous and hideous war.

JOHN RITCHIE, JR.

ANOTHER INTENSIVE COURSE IN NAVAL ARCHITECTURE

Such has been the demand for men trained for naval architecture and so instant was the placing of men trained in this specialty on the occasion of the previous course, that the Institute is offering another course similar to that of six months ago. It will be an interim course which will begin February 4 and end about May 24, open to the graduates of technical schools and other persons having the same preparation. This course, under Prof. C. H. Peabody, gives training in theoretical principles and in ship design. Students in the course will have the privilege of taking other work at the Institute for which they may be qualified.

THE McKAY WILL INTERPRETED

The Supreme Court decides that Harvard and Technology
must keep the letter of the law

By a decision of the Supreme Court of Massachusetts on November 27, 1917, Harvard University and the Massachusetts Institute of Technology are forbidden to carry out the terms of their agreement under which the latter was to receive three-fifths of the income of the Gordon McKay endowment to Harvard. It has been estimated officially that the fund, in 1956, will amount to \$22,948,890. Other estimates place it at \$30,000,000 at that time.

The purpose of the agreement was to permit Harvard, which abolished the Lawrence Scientific School, to merge its scientific courses with those of Technology, to carry out the terms of the endowment, which bestowed the money for courses in mechanical, electrical, civil and sanitary engineering, mining, metallurgy, and research work, without re-establishing the school. According to Frank E. Stanley of Swampscott, Mass., one of the trustees of the fund, none of the income has yet been paid to Technology, the agreement, so far as it affected the endowment, having been held in abeyance pending the decision of the court. There are at present several scores of Harvard students at Technology under the terms of the merger.

When the agreement providing for the sharing of the fund was reached between the two institutions, Mr. Stanley and George E. Gilbert of Boston, the other trustee, interposed objection on the ground that such an arrangement was not in keeping with the purpose of Mr. McKay, who intended that Harvard should handle the money and develop a scientific school under its own control.

Accordingly the question was taken into court and arguments were heard by the full bench on the 15th of last month. John G. Milburn of the New York bar represented the trustees. With him were Henry Wheeler, Andrew Marshall and Pierpont L. Stackpole. Arrayed against him were Charles F. Choate, Jr., and Fred T. Field for Harvard, and Richardson, Herrick & Neave for Technology.

The court's decision says:

"We are constrained to instruct the plaintiff corporation that it cannot lawfully carry out this agreement between it and the Institute, as far as respects the property received by the University under the deeds of trust and the will of Gordon McKay.

"In substance the plan agreed upon between Harvard and the Institute of Technology devotes three-fifths of the endowment to an engineering school, which is not only located at the Institute, but is conducted and controlled by the Institute instead of by the University. We cannot assent to the assertion of counsel that 'the school of applied science on the Charles River embankment is a Harvard school, a department of Harvard University.'

"Education and research in the five branches covered by the agreement are to be transferred from the University to the Institute, and there conducted under the provisions of the agreement as part of the latter's curriculum. The Harvard professors associated with those courses shall become members of the faculty of the Institute, and the property and equipment which the University may hold for the promotion of instruction in industrial science shall be devoted to the courses so conducted."

The opinion refers to the fact that the students register in these courses only at the Institute, and adds: "It seems to us that they will become a part of its complete and distinct life, even though they are entitled to make use of the museums, libraries and playgrounds of the University and receive the degrees of both institutions on completing any of the engineering courses.

"The faculty which determines the conditions of entrance, prescribes the courses that lead to degrees, largely shapes and carries to practical application the instruction and discipline of the school, and mainly influences the appointment of professors, is the faculty of the Institute, notwithstanding that 14 of its 120 members come from the University.

"The effective instrument is the deed of trust executed October 30, 1891, and confirmed by a codicil November 5, 1891. Mr. McKay had been a successful manufacturer and inventor of machinery. He was a man of artistic tastes, a lover of music, and had traveled extensively in Europe. From 1864 or 1865, for more than twenty years, his home was in Cambridge, near the college yard; he took a leading part in supporting the Symphony concerts in Sanders Theatre, and was brought into friendly relations with many of the

college teachers and students. He appreciated the advantages of combining training in the exact sciences with liberal culture in the atmosphere of the University. During all those years there was a close personal intimacy between him and Professor Shaler, long connected with the University and appointed Dean of the Lawrence Scientific School in 1891; and with the latter Mr. McKay discussed his scheme for the disposition of his fortune.

"The income of the McKay endowment must be administered according to the intention of the founder, Gordon McKay, even though it be at variance with our views of policy and expediency.

"Reading this instrument in the light of the circumstances already referred to, it seems reasonably clear from its expressed provisions and implied limitations that Mr. McKay intended that not only the investment of the endowment fund, but the education which his endowment was to make possible, should be under the control and direction of the University, its government and administration.

"He selected as a trustee to carry out his purpose a great educational institution, one whose ability adequately to carry out his plans he was familiar with, and with whose historic name he desired to associate his own in perpetual memory.

"In our opinion this intention of Gordon McKay is not in fact carried out in the agreement in controversy, as we have construed its provisions in their practical operation."

Although the decision prevents Harvard University from carrying out its plan of giving part of the Gordon McKay fund to the Massachusetts Institute of Technology, so as to use Technology's equipment and not be compelled to erect a school of its own, officials of both institutions look for a friendly, satisfactory and economical solution of the problem.

A representative of Technology said that only a small part of the fund is available now, and that years must elapse before it will grow to the mark where it can be looked upon as sufficient to fulfil the expectations of the testator. So far, Harvard has paid nothing to Technology out of the McKay fund. All the money which was turned over came from its own treasury.

It was explained that the question is a Massachusetts matter, and probably never will be taken out of the Commonwealth for a decision.

President Maclaurin in his address at the Annual Alumni Dinner



CHARLES HERBERT PRATT
Donor of the New School of Naval Architecture



FRANKLIN STETSON PRATT
Brother of Charles, in whose memory the Pratt School was given

in January said that a way out must be found and would be found, and that one of the last acts in the life of the late Colonel Livermore was to sketch out a plan whereby he believed Harvard and Technology might mutually profit and yet remain within the letter as well as the spirit of the will.

In the Miscellaneous Clippings will be found the most notable editorial comment on the decision.

NEW ARMY SCHOOL AT TECHNOLOGY

On December 17 a new Military School for the Training of Engineer Officers was started at the Institute. The men attending this school are recent graduates from the Second Officers Training Camp. These men have been assigned to duty in the Aviation Section as Ground Officers for the purpose of being trained for engineer officers in squadrons. The course which will be given to these officers consists of practical and theoretical work in Military Studies, Gunnery and Aeronautical Motors. They will also study such subjects as Aids to Flight and Airplanes.

This period of instruction will last four weeks, and at the end of that time these officers are expected to be able to help further the instruction in the Ground and Flying Schools throughout the country, which are preparing the Great American Army of the Air.

The Academic Board of the School of Military Aeronautics is made up as follows: Prof. C. B. Breed, president; J. C. McKinnon, assistant president; and P. C. Leonard, recorder. The following men on the Board are in charge of their various departments: A. E. Powell, Aerial Observation; Lieut. L. A. Swan, U. S. R., Aids to Flight; F. V. duPont, Airplanes; D. A. Fales, Engines; Lieut. W. C. Wood, U. S. R., Gunnery; Capt. Rodman Gilden, U. S. R., Military Studies; and H. N. Carlson, Signalling and Radio.

A REPORT FROM THE AUXILIARY WORKROOM

BOSTON, January 29, 1918.

The Technology Workroom for War Relief, which was opened on October 1, 1917, has now been in operation for four months and is no longer to be considered as an experiment but rather as an established part of the service M. I. T. is offering to the nation.

The Committee finds it difficult to thank sufficiently the Department of Architecture for its courtesy ever since the Workroom was first inaugurated and for the increasingly warm assistance given to the work. The room first granted by that department became recently so overcrowded that larger quarters in Room 10 have now been assigned for our use.

With the growth of interest, it has been decided to keep the Workroom open for an additional half-day, namely, Wednesday mornings from 9.30 to 12.30.

The following report of what has been accomplished in four months is submitted by the Director. From this time on a Bulletin of progress will be issued at the beginning of each month, which will include the report of the treasurer.

ARTICLES DISTRIBUTED OCTOBER 1, 1917, TO JANUARY 29, 1918	
Convalescent robes	95
Laundry bags	317
Pajamas	141
Pneumonia pads and jackets	345
Slippers (pairs)	447
Towels	529
Surgical shirts	112
Helmets	126
Identity bags	100
Mufflers	167
Socks (pairs)	448
Over dressing socks (pairs)	152
Sweaters	516
Wristers (pairs)	268
Chocolate (pounds)	100
Tea, coffee, sugar (pounds)	5-10
Soap (bars)	100

Comfort bags.....	490
Comfort kits.....	159
Water bags.....	18
Air pillows.....	12
Victor records.....	46
Paraffin bags.....	46

We have also distributed over 500 sundry toilet and kit supplies.

We have sent to Mr. Van Rensselaer Lansingh, at the University Union in Paris, many packages by parcel post, also four trunks, which have been very kindly taken over by four friends as personal luggage, the two largest trunks Mr. Lansingh has already acknowledged, and we have had appreciative letters from him and from Robert M. Allen, acting director. Also two large cases of knitted garments and comfort bags have been sent to the Red Cross to forward to the Union.

About 80 M. I. T. men have come in to the Workroom to exchange farewell greetings with us before sailing or before going to distant camps. They have all been fitted out with such things as we could persuade them to accept or as they most evidently needed and requested. There is no feature of our work which is more helpful to us than the visits of these young men, and we ask all friends to make known the fact that we are always here with open doors for Technology men.

We are beginning to hear that the Christmas boxes sent to individual M. I. T. men in France were actually arriving before Christmas and were being thoroughly enjoyed. We have sent comfort bags to our men as far distant as Camp Beauregard in Louisiana, Camp Funston in Kansas, and Camp Lewis, Washington.

The grateful letters which we constantly receive from young men to whom we have sent our boxes and bags give us confidence that we are supplying a real need.

A captain of engineers writes from "a cold little billet in a small town in France . . . mercury 19° below 0 Centigrade—snow on the ground, icicles hanging from all huts":

"It gives me great pleasure to acknowledge the receipt of a Christmas parcel containing three sweaters, two pairs of wristers, five pairs of socks, and one knitted cap for the men of my company, and I wish to thank you very much for your kind remembrance.

"All the Tech boys were well supplied with all the articles, so

I have taken the liberty of giving these articles to boys who needed them badly. They are all very grateful. The whole company is happy over the way our good friends back home have remembered us, and the determination to do all we can to keep the Hun from our own New England firesides is strengthened all the more.

"We are doing a man-sized piece of work here and all the men are working hard. They like to see things grow.

"Christmas Day we had our regimental band here and we had concerts, boxing and wrestling bouts, songs and vaudeville acts, with a real Christmas dinner of turkey and cranberry sauce. The entertainment was held in the large new Y. M. C. A. building which we erected ourselves and wired for electric lights ourselves in ten days' time. We also established the power plant which supplied the electricity. We have over four hundred buildings to erect with all water, sewage system and electric lighting, etc., and we are working in mud, snow and rain to do it. Things are coming along finely and we make good progress."

A private in camp in Louisiana writes, "The box certainly was wonderful and all the boys thought I was just the luckiest one ever. It is the best sweater I have ever seen, and there was so much in the package it seemed as if good things were never going to stop being unpacked. I have given some of the knitted things away to less fortunate boys."

Another letter says, "I know that I am not the only soldier whose heart has been gladdened, or whose personal comfort has been increased by the receipt of such packages, but I do want you to know that I appreciate it from the bottom of my heart and thank you."

The workers have come in part from the Technology matrons, but there are also many kinswomen of students, past and present, who are finding here a friendly center of interest and affiliation with the Alma Mater of men who are giving their substance or their lives for a great cause.

The following sentence from a letter of a relative of one of the boys who had been fitted out from the Workroom is typical of many that are received: "R. was greatly impressed by the work of your Committee and said on his return, 'Hang it all, they were so good to me I couldn't say a word,' and then as he left us, he said, 'It gives a fellow quite a different feeling on going into the war to know that all that stands back of him.' "

From the beginning the program of the Committee was intended to be elastic enough to provide for emergencies and special cases. Consequently, when the news came of the disaster at Halifax, the whole strength of the Workroom was turned into the preparation of surgical garments and other things to meet the sudden need. Volunteers from outside Technology poured in, and on Friday, Saturday and Sunday (December 7, 8, 9) there were completed: 300 pneumonia pads, 27 surgical shirts, 12 suits of pajamas and 4 blanket wrappers.

In addition, a large quantity of clothing, both new, and second-hand in excellent condition, was received, and this was all packed by Mrs. S. J. Mixter of the Emergency Committee with an able staff of assistants, who added a large amount of equally good material collected by themselves, so that twenty-four large cases were forwarded on Sunday night (December 9) by the American Express Company. On Thursday morning (December 13) a telegram of thanks was received from Mrs. Charles Archibald with the good news that almost everything had already been distributed.

The Workroom was kept open all day during the week of December 10-17 so as to provide additional garments if necessary. Since that need did not arise, these garments were given to the Red Cross, to help fill the gaps made by the enormous drain upon their surplus stock.

The money for this extra emergency work was especially contributed for the purpose so that none of the regular funds of the Workroom were diverted to Halifax.

On December 29 an emergency call reached the Director through Mrs. Atkins of Belmont from Major Holbrook, of Fort Strong, saying that there were four hundred recruits there with entirely insufficient clothing. Fortunately, we were able to spare 75 sweaters, 50 pairs of wristers, and 12 mufflers, which were immediately shipped through Mrs. Atkins to Major Holbrook.

The Workroom stands first and foremost for the benefit of M. I. T. students and graduates in war service at home and abroad. But after meeting their needs, it ought to be able to do something for others, particularly through the agency of Technology men holding responsible positions. By thus maintaining a center of helpful activity for women affiliated in any way with Technology, we may hope to be able from time to time to do something for our Allies in other lands. Consequently, when in

early December the tragic situation of the hospitals in Italy was brought to our notice, the Director invited the ladies of the Work-room Committee and the Heads of Days to listen to a statement by Miss Rose Dexter, Chairman of the Committee on Ways and Means of the New England Society for Italian Relief. Miss Dexter impressed us so much with her tale of the extraordinary suffering in the Italian hospitals that we decided to do as much as we could with the money at our command — always after the needs of M. I. T. men are supplied. It is hoped that representatives of our own in Italy will be able to look after the distribution of such supplies as we can send them, but until this channel is definitely established we shall work ahead, to have a reserve ready for their call, or to be shipped through the Italian Relief Fund at 296 Boylston Street.

An arrangement, like the above, under which Technology women work together for war relief wherever the need is greatest is obviously a broad and beneficent program in harmony with what we like to call "the Technology spirit."

We have to acknowledge with deep gratitude many substantial gifts other than money from some seventy-five friends. These donations range all the way from a box of wafers to whole bolts of cloth, bundles of carpeting (for slippers), a gross of razors, large quantities of wrapping paper, twenty bedspreads, and all the various and most welcome knitted garments of which we can never have too great a supply. It would be a pleasure if it were practicable to name in turn all who have so generously coöperated with us. It is hoped that the acknowledgments made at the time have duly reached these kind donors.

Mrs. Pearson's report for the Book Committee to January first follows. We desire to emphasize our belief that a great benefit at little cost may be extended to our young men in camp by the circulation of literature. If friends will send in the names of Technology men in service, reading matter will be forwarded, thus affording them a means of diverting weary or leisure hours.

MARY K. SEDGWICK, *Director.*

The Book Committee has received, from over fifty people, upwards of 1200 books and 600 magazines; it has made, or received ready made, 75 story-scrap-books; it has made, given out, and received back, filled, 25 scrap-books, — collections of pictures,

jokes, cuttings, grave and gay, etc.; it has received five picture-puzzles, and a good deal of material ready for use in scrap-books, also covers for story-scrap-books from Mr. Miles Holden, and all the paper for the scrap-books from Mr. James P. Munroe.

Except for recent issues, magazines are largely useful for story-scrap-books and scrap-books; to the Government Aviation Schools at Technology have been sent several sets, complete for one year, of *Life*, *Judge*, and the *National Geographic*, and every week a dozen or so current magazines. Books are sent out either one or two at a time to men at a long distance or in the M. I. T. Portable Bookcase, a light wooden box with a handle on its sliding cover. The Committee has distributed to individual men fifty of these boxes, each containing about fifteen books, a recent magazine, and the circulars of the Auxiliary; most of the boxes have gone to Camp Devens, some to Fort Standish, Fort Strong, Westfield, and Brooklyn. Probably we shall not again send boxes as far as Florida, Ohio, and Illinois, but five boxes sent to the Technology Club of thirty members at Fortress Monroe still seem to represent good policy. In addition to these 50 boxes, 15 have gone to the Base Hospital at Camp Devens, at the request of Major Frothingham; the hospital boxes contain, besides the usual variety of books of fiction, verse, humor, biography or essays, nature or travel, etc., a scrap-book, and a folding checkerboard with checkers. Mr. Ritchie carried a portable bookcase on his tour among the Technology Clubs.

Various expressions of enthusiasm for the books and the boxes have come to the Committee. One man wrote of his watching a Greek, deep in the "Agamemnon," and a Spanish American, in "*California Missions*"; a Tech man in hospital at Camp Devens expressed his delight in the book-box, its origin and its contents; one man said his single volume was the only Christmas present he had received, and implied that it would accompany him to France as a matter of course.

The Committee will, on request, mail a book at regular intervals to any given address; a sum of money deposited for the postage would, of course, be helpful. We shall welcome any one who will come in to help on the scrap-books, or in tying up books. Finally, we ask for a continuation of the generous supply of books and magazines.

ELIZABETH W. PEARSON, *Chairman.*

TECHNOLOGY WORKROOM

FINANCIAL STATEMENT, OCTOBER 1, 1917, TO FEBRUARY 1, 1918

Received

For General Expenses:

From Alumni Committee	\$2,000.00
From Individual Alumni	426.00
From other friends	3,722.40
	—————
	\$6,148.40
For equipment	9.00
For the sick	10.00
For victrolas	1.00

Wool Fund:

From Alumni	\$750.00
From friends	435.07
	—————
	1,185.07
Chocolate Fund	21.82
Tobacco Fund	10.73

Kit Fund:

From Alumni	\$23.00
From friends	215.00
	—————
	238.00
Slipper Fund	100.00

Italian Fund:

From Alumni Committee	\$2,000.00
From friends	55.00
	—————
	2,055.00
For book expenses	17.00
Halifax Fund	178.03

Refugee Fund:

Balance Halifax Fund	\$271.47
From friends	100.00
	—————
	371.47
	—————
	\$10,345.52

Spent

For Wood.....	\$4,473.35
Materials.....	783.61
Kits.....	1,059.72
Sewing findings.....	166.65
Red Cross garments.....	115.20
Slippers (since December 1).....	267.82
Food in kits.....	63.51
Italian Relief.....	438.17
Refugee Relief.....	309.45
Halifax Relief (total).....	178.03
Printing.....	62.81
Equipment.....	169.29
Books.....	31.60
Current expenses.....	339.43
Petty cash.....	243.59
Cash on hand January 31.....	1,643.29
<hr/>	
	\$10,345.52

CAROLINE C. BIGELOW, *Treasurer.*

MAJOR PRESCOTT TO MAKE TOUR OF CANTONMENTS

Major S. C. Prescott, '94, Professor of Industrial Microbiology at the Institute, is about to start on a tour of inspection of many of the various training camps and cantonments throughout the country. He will deal entirely with the quartermaster and the conservation officers, and will inspect the food and the sanitary conditions of the camps. Major Prescott's trip will take him principally through the Southern and Southwestern States, and will consume about three weeks.

LANSINGH AT THE FRONT

What our representative abroad saw in a motor trip in September. A picturesque story told in a letter to his son

I think that you will be interested in my last trip to the French front, so I am going to tell you all about it. You know that I have been investigating the use of oxyacetylene welding as used by both French and British armies in their repair work at the front and at their base camps. As I did not get all the data necessary the first trip, I had to go back again. This time, I did not go by rail, but through the courtesy of the French Government, I was furnished with a limousine car and chauffeur so I travelled both in comfort and style. Moreover, we were blessed with perfect weather the whole of the journey, neither too hot nor too cold, and with sunshine all the time. It started to rain, however, within half an hour of my return. As a result, while I went on a business mission and accomplished what I set out to do, I had in addition an extremely pleasant and interesting trip.

On my trip I was accompanied by Mr. de Coppet, a Princeton College man, who was assigned to me by General Pershing's staff to act as interpreter. As he is not only a good interpreter, but also an interesting young man, he made the trip much more enjoyable. Captain Dr. Vève, a French doctor in charge of one of the large hospitals near Chalons, also went with us part way, as he was on his way back to the front. Dr. Vève is extremely interesting. He is the man who started the famous paper, "Le Poilu," for the French soldiers. Poilus is the name given to the French privates, the same as they are calling our boys "Sammies." Dr. Vève wants to include in his paper a page in English devoted to our boys, so he came to our club to see whether he couldn't get some material for the first one or two numbers, after which the "dope" will be furnished by our boys and officers at the front. I managed to scrape up a lot of stuff for him, which I sent to one of the Y. M. C. A. men who has agreed to edit the English page; for while Dr. Vève speaks English fairly well, I am afraid he wouldn't be able to comprehend the subtleties of some of our American jokes—for "Le Poilu" aims only to be humorous, never

serious—and, read by both the French and Americans, ought to help cement the already friendly relations existing between them. All of which is purely introductory to saying that in our all-day auto ride we enjoyed Dr. Vève's company exceedingly.

We started from the club a little after nine o'clock on last Monday and after stopping in the city to get some maps, etc., got beyond the city walls before ten o'clock, and started northeast over the bully French roads. Here let me digress a little and tell you about French roads. France has always been noted for her superb system of roads, but I had supposed that with the war they had been allowed to run down. And of course they have not been kept in as perfect repair as formerly as so many men are at the front, but on the whole they are excellent, and any piece which has really become worn is under repair. This applies to the country outside of the war zone. The instant you get within the war zone, extending perhaps some twenty miles or so back of the front, you find thousands and thousands of soldiers working on the roads, with steam rollers and all the necessary appliances to make first-class repairs, and even in some cases, with tar, precious tar, used as a binder. Of course, when you get very near the front you find the roads full of shell holes, but these are rapidly filled with crushed stone, so that heavy loads can be dragged over them. In one place we visited, they were building a new road across the meadows. This road was elevated about four feet above the surrounding ground, was about twenty-five feet wide and consisted first of about three feet of gravel, then a foot of large pieces of stone taken from the ruins of houses, then a layer of smaller crushed stone and finally a regular macadamized surface. Imagine building a road like that exposed at all times to shell fire. Of course, it was protected by camouflage on both sides, consisting of wire netting about twelve feet high, covered with grass, leaves, etc., so as not to be readily distinguished by the enemy from the surrounding fields.

We stopped for lunch at Château Thierry, a beautiful town. The hotel was crowded with French officers and a few civilians. This city is outside of the war zone, and so far, nobody had questioned our right to go where we pleased. After lunch, I bought a few postals, and we started to climb out of the valley, winding up over the hills and every moment getting new vistas of the valley with its winding river and the charming little city nestling on both

sides of the stream. The Germans had penetrated south of the Marne, on which Château Thierry stands, but in their rapid retreat had not destroyed the beautiful old stone bridge over the river. In fact, the only sign of damage I saw was a hole in the wall of the hotel, made evidently by a small-sized shell, and which had been patched up so as to still show where the shell had struck.

From Château Thierry we struck north, and at last came to the camp where most of the Tech boys are located. I shan't mention the name as it would mean nothing to you and the censor might object. We found quite a bunch of the men in camp, although some of them were out on their *camions*, as everybody over here, both French and Americans, calls motor trucks. I carried a bunch of magazines to the boys which were most welcome, and in addition, they all seemed mighty glad to see the Director of the Tech Club and express their appreciation of the service they are getting. You see, we do all sorts of errands, commissions, etc., for any of the boys, no matter where they are situated, and they all like to feel there is some place where they can go for help or advice.

The boys have rigged up a hot and cold shower bath, and several of them were thoroughly enjoying it. We didn't stay very long, as Dr. Vève had to get back to hospital by six o'clock, so we made our farewells and started off. We went through Fismes, which is about six miles from the front, and finally reached Epernay and then Chalons. On the way, we passed thousands of men marching, working on the roads, etc., and the whole scene was extremely interesting. We were at this time in the famous champagne districts as we were not far from Rheims and actually went through Epernay, where are the cellars of such well-known firms as Moet & Chandon and Piper Heidsieck.

Dr. Vève's hospital is north of Chalons several miles, so we took him there first and then returned to Chalons to spend the night. We tried the three best hotels there, but they were all full, as there was a bunch of American engineers encamped near there on their way to their headquarters. We finally got rooms at a little hotel near the railway station; but prayed that we wouldn't have to sleep there again as I, at least, was preyed upon at night, but slaughtered the enemy in the morning.

Chalons sur Marne is a quaint city with many picturesque views. I was there before on my other trip to the French lines,

but now the city looked quite different with all the American boys wandering up and down. We went to the Hotel d'Angleterre for dinner, although we couldn't get any rooms there and the hotel fully came up to its reputation for serving good meals.

The next morning we started on our way further forward to the east, as our destination was the army in the Verdun section. We got away at 7.30 and gradually got nearer and nearer to the front lines as the road slanted in that direction until, when we were about three miles from the front, we turned suddenly to the south to where the French second army staff was situated. There, after I had presented my letters (credential), we were splendidly received and after an inspection of their welding apparatus, had lunch with seventeen officers. I sat next to an English-speaking officer while de Coppet sat next to the colonel in command. All went happily including the food, for when one breakfasts at 7 a. m. on a cup of coffee and a bit of bread, and then motors until noon, he is generally quite ready for the plain but good lunch we had.

After lunch, an officer was assigned to us, and we started out to visit the oxyacetylene welding apparatus and methods as used in the second army. This led us to several places where we saw much that was interesting. One was the repair of a heavy steel cupola for machine gun fire, another a double machine gun which could be used so that in case one gun was damaged the other could be brought into play. Finally we came to the Engineers' camp not far from Verdun, and here the colonel in command asked us if we wouldn't like to inspect some of their work on the Meuse, the river which flows there at Verdun.

So we four got into the car, and after driving through the suburbs of Verdun, turned north to Charny. On our way, the road was protected by camouflage, sometimes on one side, sometimes on the other, shifting with the winding of the road, and finally when we got near Charny, the camouflage was on both sides of the road. Of course, all the houses *en route* were mere shells or piles of ruins.

We left the car at the village, or rather its ruins, and crossed the river on a bridge of boats. Just ahead of us about four hundred yards was the famous Côte du Poivre or Pepper Hill; which so long figured in the dispatches. In fact, it was only about two weeks before that the French had wrested this hill away from the Boches. There was a lively artillery duel on at the time. The

Germans were trying to search out a French battery and were using both shrapnel and high explosive shells. The former were mostly breaking in the air, and scattering their missiles ahead over the ground, while the latter threw up clouds of dust and black smoke. The French guns were replying, so that it made a most interesting spectacle, something like a Fourth of July. Of course, if the Germans had shifted their guns a little they would have made it interesting for us, but fortunately they didn't. The peculiar thing about it all was that I wasn't in the least afraid. They say that this is the invariable experience of men; that it isn't until one has been under shell fire for some time and seen men killed and wounded that they begin to fear. The French colonel very kindly allowed me to take some photographs of scenes of no military value, and I think they will be of interest to you. I am sorry I forgot to take some pictures of the camouflage protecting the roads, but I didn't think of it until too late. After watching the artillery duel, we proceeded down the river a way to where they were building a bridge, and there crossed back again by one of the steel pontoon boats which the soldiers poled across. It was all very interesting to watch, especially with the shells breaking only a few hundred yards away, and was by far the most interesting experience I have had yet. Only a mile or so away was Dead Man's Hill, where the guns were flashing, Hill 304, and other noted places, so that we felt as though we had been almost in the midst of things. Of course, we were a long way behind the front trenches, as the French have swept the Germans back during the last few weeks until they are back to almost where they were when the attack on Verdun started; but as we were in the district where the great guns were belching forth fire and shell and the German guns were trying to destroy them, we felt as though we had seen a little. How tame it seemed to go through ruined villages, etc., after having actually seen the shells break and heard the guns roar!

After we had bid our hosts good-bye, we motored to our hosts of noon who had urged us to stay for dinner. We stopped on the way at an aviation camp to check up the data on welding, and it was well we did so as we found some slightly different practice at this place. We had dinner with our seventeen hosts. Two of the officers were not present, as a couple of nights before, the place had been bombed by airplanes, and one officer had been killed

and others wounded. After dinner, we bade our hosts good-bye and sped on our way. What a ride we had that night! The moon was nearly full, the air warm but not oppressive, and as we sped along without lights, for we were not far from the front, we sat back and drank in the effect and said but little. Forty miles from our start we pulled up at what turned out to be a hotel, although nobody not "wise" would have ever suspected it, and we were soon in the land of slumbers, safely covered from the night air by one of those foot-thick quilts which make up in thickness what they lack in other dimensions.

The next morning, we were on our way again at 7.30. We were making back tracks for Paris where we expected to arrive the following night, as we were then some hundred and fifty miles away, but owing to rather favorable circumstances we actually got back the same night. We first went to Chalons, where we called on our old friends, Capt. _____ and Lieut. _____, names unknown to you but probably objectionable to the censor. From this point we telephoned to Dr. Vève that we would be out to lunch as per his request, and half an hour later we sat down to a special lunch gotten up in our honor, and which included all such delicacies as lobster salad, cakes, champagne, etc. I took a picture of the group at lunch and also outdoors, and if they turn out well—they are not yet developed—I will include them in this letter.

After lunch, the doctor and a friend drove with us to Chalons, where we left them and went to a large aviation repair shop some seven or eight miles out of the city. We had been there before and we received a cordial reception from the officer in charge. I got the welding data I was after and then we spent an hour watching the aviators land and also start out, as airplanes were coming or going most of the time. I got some good pictures at this place, showing machines in flight.

Epernay is about twenty miles from Chalons, and is the seat of the famous champagne house of Moet & Chandon, founded in 1743. Dr. Vève had given us a card of introduction to Count Chandon, who is the head of the firm, so we stopped. The count was out but we went through the cellars where are stored eighteen million bottles of champagne. These cellars are really vast passageways, perhaps twenty-five feet wide and twenty feet high. They run at right angles to each other, and as close together as it is

possible to put them, and still leave sufficient rock, out of which they are hollowed, to give proper support. There are two tiers of cellars, the lower one being a hundred feet below the ground; it is thus a uniform temperature is maintained the year round. The champagne is mostly stored in bottles, although a reserve stock is also held in large wooden casks. The bottles are covered with dust, many of them having been there over eleven years in their process of aging. The cellars of Moet & Chandon cover about twenty-five linear miles; and I figured out that with two stories deep and placing the galleries as close to each other as they could, there would be covered an area of about one thousand feet each way, so you can see how vast the project is.

The Germans took Epernay on their way toward Paris, but destroyed nothing, as they expected to return at their leisure, but as they returned in great haste, they had no opportunity to wreak their vengeance, so that the total loss of Moet & Chandon was about two thousand bottles. Some luck, that was.

By the time we had inspected the wonderful cellars, the count had returned, so we paid him our respects in a fifteen-minutes call, and then started back for Paris. It was getting to be dusk when we drove up to the hotel in Montmirail, where we had dinner. Dinner was not very much to boast of, but the splendid moon beckoned us on our way, and all too soon we arrived in the suburbs of Paris and reached home again about 11.30. All told, we had three long, strenuous days, days full of excitement and pleasure over and above the collection of the data for which we had come. I haven't touched much on that side of the story as I don't think you would be interested in it. Suffice it to say, I am now in a position to complete my report to the American army on the French practice on oxyacetylene welding but have still to finish my collecting of data on British practice.

I forgot to tell you of one interesting sight. A French airplane endeavored to make a landing about a hundred yards from a road on which we were motoring, but at the last moment took a header into the field, pretty well smashing the machine, but not hurting the operator. The propeller was smashed, the wings crumpled, and the wheels torn off, so I secured a piece of the wreckage as an interesting souvenir. I might say that airplanes are so common at the front that one seldom notices them unless they fly very low. Several times Boche machines came over our lines, and then the

anti-aircraft guns got busy, and if you couldn't see the machine you could trace its progress by the pretty little bursts of white cloud marking where the shrapnel had burst. These little puffs of white smoke would float in the air for ten minutes or more before fading away, and formed a pretty sight against the bright blue of a clear sky.

The last night we were out, we planned to stop at, let us call it A, but instead went a different way and stopped at B. That night A was bombarded and about twenty people killed and wounded. These beautiful clear moonlight nights are ideal for airplane raids, and as a result many people—mostly civilians—are killed or wounded.

So much for my last trip to the front. I hope you won't get tired of reading such a long epistle, but sometimes it is interesting to get first-hand impressions.

THE ENGINEERS AND THE WAR

How the 30,000 engineers represented in the great technical societies of this country are quietly serving the Government in performing all manner of duties—confidential and otherwise, was disclosed at the Convention of the American Society of Mechanical Engineers by Mr. Gano Dunn, chairman of the Engineering Committee of the Council of National Defense. Mr. Dunn said the Government had made numerous and various calls upon engineers for service, and there is not yet on record a single case in which the Government has asked an engineer to perform a service and the service has not been promptly and faithfully rendered.

Mr. Dunn related how at the outset of our war the Government soon used up its own resources of professional men and fell back upon those of the great technical societies which responded patriotically to their new duties and opportunities. He said that the United States is not really in the war yet and he expected the time to come shortly when all the engineers of the nation would be needed for service. He said the engineers stood ready to respond, even as numbers have already responded by severing all their business connections and sacrificing their incomes.

TECHNOLOGY AND THE NEW CHEMICAL SERVICE

Because the present war is a struggle of chemists pitting their knowledge and the researches of their laboratories one against another, there has been established a new section of the National Army, and because the Massachusetts Institute of Technology has devoted so much of its resources to industrial chemistry, it finds its instructing staff requisitioned. The most noteworthy action on the part of the Government here is the appointment of Prof. William H. Walker, Ph.D., Eng.D., professor of Chemical Engineering, in charge of the course in Chemical Engineering and director of the Research Laboratory of Applied Chemistry, to the rank of lieutenant-colonel in the new Chemical Service Section, U. S. N. A. Colonel Walker has been given leave of absence from the Institute and is now in Washington.

The general public has had intermittent news which has served to give to it some idea of the importance of chemistry. Much has been said in a general way about gas and gas masks, about fighting with flame and about hiding vessels with smoke. These have, however, been merely straws that indicate an intense activity in chemistry in war work, the real story of which cannot be written until the struggle is over. There are some general facts, however, that are not anybody's secret, which may be instanced to show wherein lies the importance of chemistry.

One naturally looks at once to the explosives, a purely chemical study, for an example of chemical research, for they supply the tremendous and attention-compelling feature of battle, but these, important as they are, find their peers in half a dozen other directions. Metallurgy and metallography are quite as important in the determination of the materials to withstand the tremendous rending force of the powder when fired, and come into most important consequence in materials for cartridge cases and shells, which demand strength with lightness and also flexibility to manufacturing processes.

Then again, the question of materials in general is important, first from the extraordinary demand, and next from the unusual wear to which articles will be subjected. Then there is the need for substitutes either to reinforce an insufficient supply or to afford

a more economical material. While war is apparently heedless of costs, there are limiting factors, and the Zeppelin at half a million to a million dollars for construction, the airplane which in its droves demands vast sums for construction, the auto and the myriad smaller items, to say nothing of the artillery and small arms with their accessories, all demand an economical production. Thus it is that rubber becomes of enormous consequence and the chemistry of rubber may well be one of the factors that will help to determine the supremacy of nations.

One looks upon the airplane as an exceedingly complicated bit of machinery, yet the importance of the machinery may be only about equivalent to that of the chemistry. The airplane is a device working in a novel and comparatively unknown medium, the air. Variations in temperature, humidities ranging from dry almost to saturation are to be encountered, great strains demand strength, great speeds demand a minimum of friction, possibility of flight at all demands lightness, while the motor seeks a fuel which can pack thermal units into the smallest space and least weight. The fabrics are a study in themselves and their treatment, to be waterproof, strainproof and shrinkproof, is another. Simple little things like the aviators' spectacles rise to importance. The dimming of these glasses may mean the loss of a life, and a new and unusual factor of safety is particularly urgent in the eyes of the gas masks that every soldier may be obliged to employ. Here chemistry seeks to replace glass with some other translucent medium. Work along this line is among the many items in which Technology men have interested themselves.

The story of chemical agency in war must include all the refinements of the chemical laboratory in the production of gas antidotes, and these must provide for future discoveries in harmful gases as well as those existing and furnish in advance their antidotes. Just how much has been done it is not possible to say, but it is a work into the direction of which the Institute force has gone heartily. Other obvious chemical agencies will be notable in flame throwers and their antidotes, incendiary bombs, signal smokes, reverting in modern fashion to the methods of the Indians, signal flares and smoke barrages. In every item chemistry is busily at work and in unexpected places it crops out in most helpful ways, as for example, in the production of the hydrogen for balloons. The establishment of a great gas works near the firing line would be out of the question

if it were on the lines necessary but a few years ago. The reduction of space and apparatus requirements to a fraction of former needs makes the observation balloon what it is, a very important adjunct to other means of watching the enemy from the air.

This very important work has had in the army heretofore no adequate direction. Other branches of the service, medicine, engineering, ordnance or supplies, have had each one its special organization. In Europe, the warring nations have long since found the necessity of an organization of the chemical factors and in England and France, since a gas service was of necessity demanded early in the war, the chemical activities have grown up around it. In this country, however, we are practically at the beginning of warlike activities and, to meet the obvious needs, there has been organized the Chemical Service Section of the National Army, with Col. Charles L. Potter at its head.

Colonel Potter selected Professor Walker to be his right-hand man, with the rank of Lieutenant-Colonel. In the work of organization, Walker immediately sought a man to be his chief chemical aid and was fortunate enough to secure Dr. Raymond F. Bacon, director of the Mellon Institute of Pittsburgh, who has been appointed Lieutenant-Colonel in the section. Dr. Bacon is to be dispatched to France where he will be with General Pershing, while Dr. Walker will himself undertake the correlation and focussing on war essentials of the enormous resources of American chemistry.

Professor Walker is accepted by all as the dean of chemical engineering instructors in the country. He is a native of Pittsburgh and a graduate of Pennsylvania State College, with advanced studies at Göttingen. To the industrial world he has contributed valuable work in the production of art glass, the method of annealing silver without oxidization, he has been identified with the chemistry of cellulose and the application of it in the industries and has done more than any other one man in the world towards the intelligent appreciation of the problems of the corrosion of metals and their solution. In the educational field he has created at the Institute the leading courses in Chemical Engineering in the world and following the suggestions of Arthur D. Little, '85, who in the intricacies of business has not lost sight of high educational aims, he has been able to bring these courses into touch with the commercial world through the Chemical Experience work, which

in its first year furnished to the country about thirty highest grade students who were in instant demand when war was declared. The department itself at the Institute has still further rallied to the help of the country, for four of the professors are giving full time to Government work and a fifth is reserving only one-third of his time for Institute work. These men are Norris, Sutherland, Wescott, Hansen, and Gilbert, and others are at work in Tech laboratories on problems given them by the Government. When it can be written, the M. I. T. story in chemistry will be a noble and striking one.

THE ENGINEERS' DUTY

It is our task as engineers to assist in making the world safe against the forces that we have unloosened, so that the century may not close with a total failure of the civilization of Christian races. It is we who have developed the application of science, and it is we who are using it to destroy one another, forced into the struggle by the rulers of a nation that knows no right except might, and no mercy except that which is taught them by the sword.

The twentieth century is still young, and we do not yet know what it will represent to the future historian. Will it be the debauch of science or will it mean a new birth to Christianity? It is the engineers' task to decide this. There are two tendencies: one toward greater comfort and luxury, and one toward greater service. The first can plunge us only deeper and deeper into war for the control of a commercial output. It can only bring us more firmly under a governing class derived either by birth or by commercial success. The second means the complete emancipation of the individual trained to think of service as the chief source of good government and happiness in life. The only theory that will hold men together is that of service.

IRA N. HOLLIS.

THE WAR AND THE TEACHING STAFF

The constant demands made by the Government and the industries allied to war for men technically trained are continually drawing from the instructing staff of the Institute, so that each succeeding list shows how closely in line with war work the teachings of the Institute are arranged.

Resignations of assistants that are now to be chronicled are, from the department of Civil Engineering, H. V. V. Fay and F. B. Hastie, who are lieutenants in the Engineering Corps, and B. M. McDill, who has similar rank in the Cavalry; from Biology, Elmer H. Heath, Jr., who is in the Medical Corps, U. S. A., stationed at Camp Devens; from Physics, Joseph Del. McManus, drafted, and A. A. Hardy, who has entered the Army; from History, W. H. J. Kennedy, to be staff officer in the Reserve Corps, and from Drawing, W. F. C. Gartner, who has gone into Government work.

Leave of absence has been given to associate professor in Physical Chemistry, Frederick G. Keyes, who is captain in the Chemical Section, to go somewhere abroad. The leave of Prof. Albert Sauveur, who is an expert in the technicalities of aviation materials, and who is somewhere abroad, has been extended until the beginning of the next academic year.

In the school of Military Aeronautics, Prof. C. H. Peabody has resigned from the position of president of the Academic Board and Charles J. Emerson from that of Dean of the school. Prof. C. B. Breed has been appointed president and J. C. McKinnon president's assistant. In the different departments of this school the following appointments have been made to the position of instructor:

Prof. S. C. Prescott, of the department of Biology and Public Health, who holds a commission as major in the food division of the Army Sanitary Corps, in which corps is also H. W. Hamilton, '17, commissioned as lieutenant, and till now an assistant in the same department at Tech.

Prof. Carroll W. Doten, of the Economics Department, is to organize the industrial service of the Emergency Shipping Corporation on its informational and statistical sides, a work he was chosen for because of his known mastery of statistical materials.

From the department of Mechanical Engineering Associate Professor J. C. Riley has been selected and given the commission of major in the Signal Corps. He is now on leave from the Institute. Professor Riley is one of the best informed of experts on internal combustion engines.

On another department of Technology a demand has been made by the Government, and A. S. Smith, superintendent of buildings and power, already commissioned as captain in the Reserve Engineer Corps, has been called to duty. He will be attached to the Northeastern Division, with headquarters at present in Boston. His duties at the Institute will be carried on by his assistant, F. G. Hartwell. The position occupied by Mr. Smith these past twenty years has been one making great demands on the engineering abilities of the incumbent. He has had charge of what may be termed the housekeeping of Technology, with a force of some two hundred under him, their duties ranging from sweeping the floors or caring for the grounds to the erection of structures and installation of the ponderous machinery. It was under his supervision that the herculean work of moving the Institute to Cambridge was done, and it was so successful that the thousands of tons of materials were transferred by the Institute's own trucks and the Institute employees and installed in their places by Tech workmen, and when the Institute opened in the fall of 1916 there was not a single essential that remained unattended to.

NEARLY \$8000 SUBSCRIBED IN Y. M. C. A. WAR FUND DRIVE

The Y. M. C. A. War Fund Campaign conducted at Technology by the T. C. A., starting with a nucleus of \$900 subscribed by the original seventy solicitors, the total contribution from the Institute was increased to nearly \$8000.

The drive lasted an entire week, during which time the undergraduates and the Faculty were canvassed. Over nine hundred students subscribed to the War Fund.

THE NOVEMBER MEETING OF THE COUNCIL

Raising the War Fund subscription

The sixty-first meeting of the Alumni Council was held in the Faculty Dining Room of the Walker Memorial, Charles River Road, Cambridge, November 26, 1917, with an attendance of forty-three.

The business on the call for the meeting was: Report of committee appointed to consider coöperation between TECHNOLOGY REVIEW and *The Tech* and the arrangements for publishing only the quarterly numbers of the TECHNOLOGY REVIEW.

M. I. T. War Fund subscription.

M. I. T. Committee for National Service.

Date and place of Annual Banquet.

During the informal supper, Mr. Henry Howard, '89, was the salad orator and spoke informally to the Council on the work of the United States Shipping Board, which he has organized.

The records of the last meeting were read and approved.

The question of the date of the next meeting was discussed. As the regular date falls on New Year's Eve and the week before on Christmas Eve, and on account of the great demand on the time of members of the Council because of war activities, the Council voted, that the formal December meeting should not be held unless business came to the attention of officers, when a meeting for such purpose would be called.

The secretary was authorized to send notices to the members of the Council informing them that a quorum would not be expected on the evening of the last Monday of December.

The Council approved the date of January 13 for the Annual Banquet.

Mr. Robbins reported for the special committee appointed to consider ways and means of coöperating with *The Tech* and arranging for the omission of the small numbers of the TECHNOLOGY REVIEW and reducing its publication to the four quarterly or magazine numbers. The secretary was requested to place upon the annual dues bills an opportunity for Alumni to subscribe to *The Tech*. The committee reported that there was no merger with *The Tech*, but that a working agreement had been arranged.

The treasurer of the Association was called upon to report on the War Fund Subscription from the Alumni.

James P. Munroe, '82, was called upon to report on the activities of the Washington Office, and he spoke briefly and then introduced our representative of the Alumni Office, who was the guest of the Council, Mr. Raymond W. Ferris, '08. He spoke of the work of the Washington Office.

Others spoke on the question of the War Fund and Mr. Emerson spoke to the Council on his belief of the importance of the Washington Office and the Paris Bureau. It was noted that Technology had been a pioneer in establishing a Washington Office and a base in Paris.

Professor Tyler then addressed the Council on this question of War Fund subscriptions and of the important work being undertaken by the War Auxiliary and the Committee on Communications. He then addressed the Council on Mrs. Cunningham's generosity and how the various reports concerning her gifts may become embarrassing if Alumni understand that certain of the activities have been supported by her. Mrs. Cunningham has given generously of her time and generously of her money without, however, wishing that the Alumni should fail to contribute to make it possible to carry on these undertakings to a much greater extent.

One member of the Council suggested that each alumnus not in service could assume responsibility and interest in one who is in service in France. Mr. Hart then explained how this would be good, but this work should be carried on through our War Auxiliary.

The Registrar of the Institute was called upon to tell the Council about registration at the Institute and proposed plans for putting the Institute on a war basis by accelerating the courses in order to hasten the graduation of certain of the classes. It is planned that the Institute shall run on a twelve-months, instead of an eight-months, basis.

Further discussion took place in regard to raising more money on the part of the Alumni for the War Fund and it was suggested that, after the class secretaries made their effort to collect more funds through their classes, the local associations be asked to assist. The importance of having some one go to the local associations was spoken of.

The President stated that if there were some member of the Council who could arrange his plans to meet various associations, the secretary would arrange such a trip.

Mr. A. D. Little, '85, spoke to the Council on various chemical problems that were before the Government and the part that Technology men are taking in these problems. The meeting adjourned at 9.45.

There was no meeting of the Alumni Council in December.

DEAN BURTON'S SECOND TRANSCONTINENTAL TRIP

Prof. A. E. Burton, Dean of the Institute, returned New Year's day from a second trip that practically bounded the United States. He has been inspecting the schools for Deck Officers that have been established under his direction for the United States Shipping Board, these schools being the suggestion of Henry Howard.

Altogether twenty-five schools were visited, it being unnecessary to include in this trip the New England ones, of which there are ten or more, or those this side of Baltimore, of which there are four or five. The itinerary, from Boston on November 24, took in Norfolk, where a second school was established by Professor Burton, and Newport News, where a new school was started. These schools are established where there are little groups of sailor men and include quite a number of smaller places, while in the larger ones like Boston, New York, Baltimore, etc., a number of successive schools have been conducted. Altogether somewhere near two thousand Deck Officers are now ready for the vessels that are under construction for trans-Atlantic trade, and a large number of men are already on active ocean service.

One of the results of the trip will be the opening of new schools for Deck Officers under Dean Burton's direction, at Detroit, Seattle, and Ureka, California.

THE JANUARY COUNCIL MEETING

The Tech Show Approved. Washington Office Discontinued

President Hart called the attention of the Council to Professor Allen's trip to local associations in the West. After a discussion, it was voted: It is the sense of the Council that the annual convention of the Technology Clubs Associated called for Philadelphia this coming spring could appropriately be postponed.

President Hart called the attention to the very few working days in February, due to the holidays, the Monday shut-downs and the short month, and it was voted unanimously, at the end of this meeting, to adjourn to the last Monday or Tuesday of March and to omit the February meeting.

Mr. Little invited the Council to meet in his new building and it was the sense of the meeting that at an appropriate time this invitation should be accepted.

After a discussion, it was voted that the next meeting be held in some place in Boston, the place to be arranged by the officers.

President Hart next introduced the topic of student activities and called upon Mr. Donald G. Robbins, '07, who presided at a conference held on January 8 at the Institute, of representatives of the Student Activities together with members of the Alumni Advisory Committees on Student Undergraduate Activities.

Following an account of this conference, Dr. Rowe, Mr. Marks of the English department, Mr. Van Kirk, president of the Senior Class, Messrs. Gilmore, White, S. K. Humphrey and Bowditch spoke on the problem. It was voted: That it is the sense of the Council that the Tech Show should be given this year.

Mr. James W. Rollins, chairman of the M. I. T. Committee for National Service, spoke of the work of this committee and of the War Auxiliary and the War Fund. He presented interesting statistics in regard to M. I. T. men in war service. It was announced that it was the sense of the committee that the Washington Office, which has been maintained since last spring and which has fulfilled a definite need and has aided many Technology men, should now be discontinued on account of the establishment of a personnel office in the various Government departments.

ALUMNI ADVISORY COUNCIL MEETS

Outlines of future policies by representatives of student activities

The Alumni Advisory Councils on Undergraduate Activities held a meeting early in January to determine the position of the undergraduate body with reference to the athletic, social, and other activities of the Institute. The various activities were represented by men who were in constant touch with them, the Institute Committee also being present.

Donald G. Robbins, '07, was appointed chairman of the meeting, and he called the assembly to order by requesting Mr. VanKirk to outline the work of the undergraduate activities for the benefit of the Alumni present. The latter stated the cause of the meeting as the desire of the Faculty and Alumni to get an idea of the way in which the war affected the activities and their financial standing.

Mr. Rolfe, of the Advisory Committee on Athletics, stated that the complete budget for this season was estimated to be about \$3375 including practically all branches of athletics. The total amount available to meet this is about \$3400, derived from the student tax and events of last year including the Tech Show. Mr. Rolfe voiced the opinion that athletics were not seriously affected by the war and favored the normal continuation of all activities as necessary to student life at the Institute.

L. M. Dalton, '19, representative of the Combined Musical Clubs, said that, on account of railroad conditions, it had been decided not to take a midyear trip, but that otherwise the regular schedule of concerts would in no wise be affected. The financial condition of the musical clubs is satisfactory.

The Tech Show will take place as in other years, provided there is a Junior Week, was the statement made by F. A. Washburn, '18, representing that activity. During Junior Week the trip to Northampton, the most profitable performance given, is made, and, therefore, the Show's existence is dependent upon the action of the Faculty upon that event. The proceeds of the Tech Show will go to the American University Club of Paris. Financially, there is no question but that the activity is one of the most successful of the Institute.

P. M. Dinkens, '18, reported the Institute and Budget Committees as performing their regular work without any breaks.

The Tech, represented by P. C. Leonard, '17, has had a successful year, especially last summer, when the number of Alumni and undergraduates subscribing was increased to several thousand. Financially, *The Tech* has had no difficulties, the advertising department being above all efficient in its work. Although many of the officers have been forced to give up their work, due to war conditions or other reasons, great interest is being taken in the paper by the freshman class.

"Technique 1919," reported by D. O. Mayer, '19, believes to have reduced its expenses far below those of other years, without decreasing the excellence of the publication. Subscriptions have been slow in coming in, but the officers believe that their quota of a thousand will be filled on time.

G. M. Macheca, '18, reporting the *Technology Monthly*, stated that although the periodical had not been very successful financially, the outlook was good, for the management hopes to increase the income by additional advertisements and subscriptions.

The Finance Committee, represented by R. W. VanKirk, '18, has not been as active as usual this year. It therefore decided at the meeting to detail this Institute Committee as an agent to see that the Finance Committee be aided in every possible way, as it is an important part of the student activities. The action of the Alumni Advisory Council is only advisory, but it is expected that it will be an important factor in any move taken by the Faculty with reference to the changing in status of any of the student activities.

TECHNOLOGY HAS TWO R. O. T. C. UNITS

A letter received in December by President Maclaurin establishes the fact that the Institute now possesses officially two Reserve Officers Training Corps units, one in the Coast Artillery and the other in the Signal Corps. This action confirms with the seal of authority the work that the Institute has been taking up recently, and in fact had taken up even before the war was declared.

The story of the negotiation which led to this result is a long and interesting one. Its beginnings reach back long before the war in the realization on the part of Major Cole that war and engineering have in later years become so much involved one with the other that the Institute in its educational work was already well fitted to train military and naval officers. But until the beginning of the war, no action was taken in Washington in the matter. It was some time later, in May in fact, that the War Department sent to Boston a commission of Army officers to look over the curriculum at Tech with a view to rating its possibilities in point of military education. The report of this commission was practically that with the addition of some small amount of special military training, perhaps an hour or two a week, the courses at the Institute were precisely those which were required in military work. Since that time the War Department has in a general way approved what has been popularly termed a four-year military option at the Institute, but has till now been unable to act officially till the details of the courses could be fixed. This has been done and Technology has now two units of the R. O. T. C.

Even before the official action the Institute had already moved towards compliance with the R. O. T. C. law; in fact, it was at the Institute that the details of the general plan were worked out. There are required, of course, for each division some differences in study. For example, the signal work requires special knowledge of electricity which must be accorded its place with military training and signalling of other kinds, while for the Coast Artillery advantage must be taken of local installment of heavy guns mounted, such as the equipment at the South Armory. All these factors were worked out by Major Cole and the members of the faculty at Tech, together with those relating to technical education with the Ordnance and the Engineer Corps.

The latter two units the Government has not yet been able to outline for the Institute, but it is hoped that they will presently be approved. They are virtually approved by the War Department, but the work of fitting in the special training with what is at the Institute a heavy and trying scientific course of study has not yet been possible.

In the hope that the outlines of the four-year military option might be ready in time for the opening of the Institute last fall, the Registrar circulated a questionnaire among the students asking how many would like to take up such an option. Although the particulars about the course were exceedingly hazy, the replies were eminently satisfactory and some four hundred of the students indicated a desire to pursue such studies. When school opened, however, the last of September, the War Department was not ready, although the Institute and the students were, and accordingly to utilize the enthusiasm that had been engendered, the Advance Battalion was organized by Major Cole, to take up military studies in addition to the regular work. The men enrolling in the Advance Battalion were to wear uniform and to devote extra hours to the military studies.

This idea served in a measure to quiet the unrest that developed when the students came back to Tech and found no recognized military work open to them. Practically the whole of the four hundred who had expressed interest joined the battalion and with the five hundred freshmen, to whom drill is compulsory by Act of Congress and who were also in khaki, Technology took on a very military aspect.

Early in the school year word was received at the M. I. T. that the Government would accept in part the plans for the military option, but this was only tentative and had application only for a year. On the basis of this, a R. O. T. C. was organized, drawing one hundred and fifty or more men from the Advance Battalion, and has proceeded since its beginning on the same general plans as those just now confirmed. In December the confirmation was complete as far as the two units are concerned and there exists now at the Institute a Reserve Officers Training Group taking its members from the sophomore class, which numbers 185 in the Coast Artillery unit and 30 in the Signal Corps. There remain in the Advance Battalion of sophomores and upper classmen some 250, so that, counting in the freshmen and their officers, there are nearly

one thousand of the students in uniform. Including the aviation schools, about seventeen hundred men in the school are under military training.

The whole question of R. O. T. C. groups has depended on one feature in military drill at the Institute. Nearly at the close of the negotiations the War Department came upon the rule that to secure the establishment of a R. O. T. C. within a school two years of compulsory drill was necessary. This requirement the faculty recently met, so that henceforth the student who enters must take two years of military science in place of the one that has been required for the past fifty years.

M. I. T. OFFICERS IN REGULAR ARMY

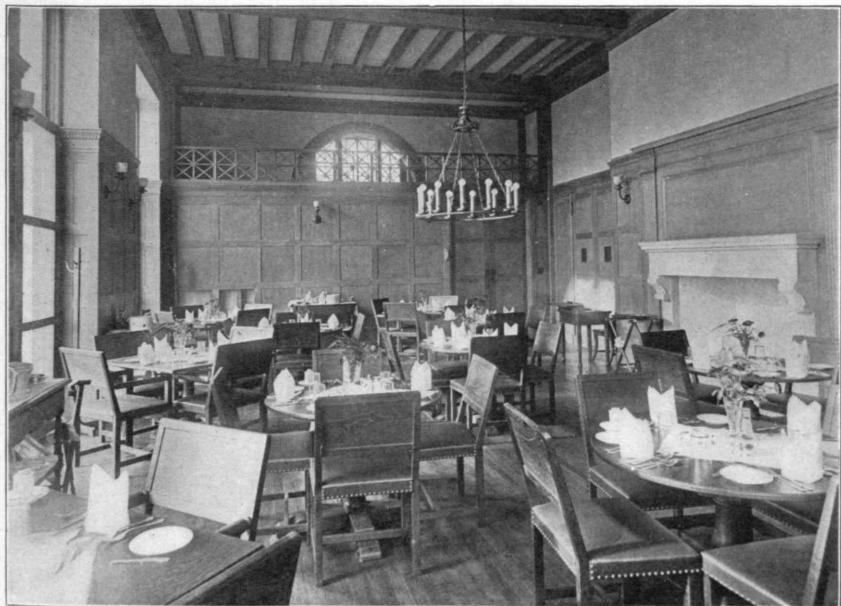
Records in the office of Major Cole show that the Institute has now more officers in the Regular Army than any other school, save West Point. It has been well understood that former students of the Institute are in the Reserve Corps to the number of some hundreds, but the strong showing in the Regular Army is quite a surprise. The list as far as made out gives the following strength in the various branches:

Engineer Corps, 16; Cavalry, 4; Field Artillery, 7; Coast Artillery, 83; Infantry, 7. The total is 117.

The records of the War Service Auxiliary, according to the secretary, Mrs. A. J. George, show that to date 1538 M. I. T. men are in khaki. Of these men, 226 are in foreign service, 168 are in aviation and 194 are in the Navy. 16 have died from casualties or natural causes.. Of the whole number, 1335 are either commissioned officers or in training camps, the latter meaning, of course, not the cantonments. Out of twelve replies to the questionnaire received in one mail, four were from majors and five from captains. "Technology flies high."



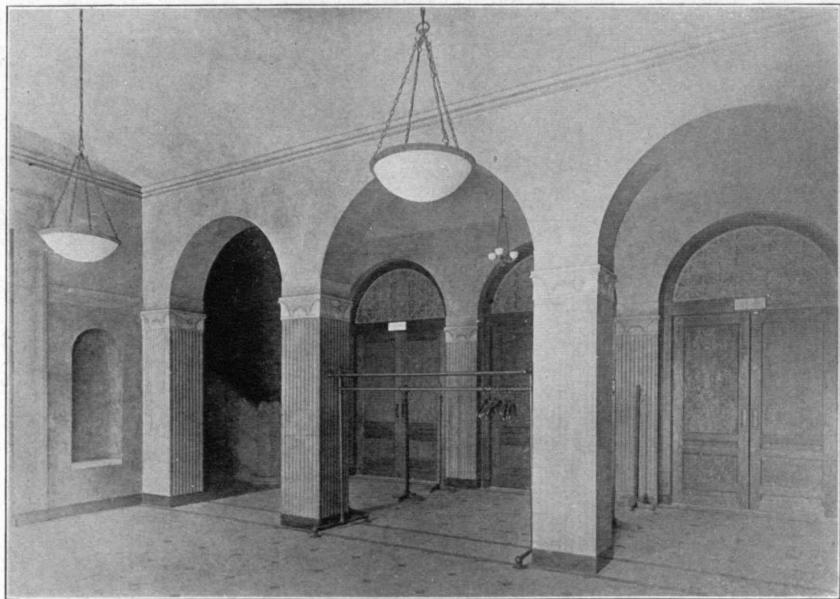
The Cafeteria



The Pleasantest Room — The Grill Room
THE WALKER MEMORIAL



THE FRONT ENTRANCE OF THE MEMORIAL



THE ENTRANCE HALL, WALKER MEMORIAL

THE ROLL OF HONOR

M. I. T. men who have died in the Service, up to
January 17, 1918

GEORGE ALBERT BEACH, '14, Aviation Section, Signal Corps,
A. E. F. Killed in aeroplane crash in France, Jan. 23, 1918.

FRANCIS PRATT BRECK, '20, enlisted (September) in U. S. Navy.
Died November 6, 1917, at the U. S. Naval Hospital, Newport,
R. I., of measles and pneumonia.

CHAUNCEY DAVIS BRYANT, '14, private, Company E. 101st Engineers,
A. E. F. Died in France, January 14, 1918, of
pneumonia.

JAMES P. CLARKE, '15, captain., Died at Camp Bowie, Texas (no
date).

M. E. COBB, '87, captain, Quartermaster's Section, Reserve Corps.
Accidental discharge of revolver caused death, Boston, August,
1917.

EDWIN LEGUIN COUCH, '17, second lieutenant, 5th Provisional
Officers' Battalion at Fort Leavenworth. Accidentally killed
at Fort Leavenworth.

W. EASTMAN, JR., '18, instructor, Army School Military Aeronautics M. I. T. Death by accident, November, 1917.

EMILE B. GAILLAC, '18, private, 101st Engineers. Died in France
of bronchial pneumonia, November 7, 1917.

ROYAL ROBBINS HEUTER, '06, first lieutenant. Killed in motor
accident before his departure for Plattsburg, 1917.

EDWARD E. HIGGENS, '86, ensign, Coast Defense of Connecticut.
Died June 20, 1917, from overwork.

JOHN H. HOLLIDAY, JR., '05, first lieutenant, Design Section, Gun
Division, Ordnance Department. Died at the Georgetown
Hospital, Washington, D. C., of pneumonia, December 23,
1917.

HENRY LAMY, '13, private, 132d Infantry, 28th Company, Army of
the French Republic. Died October, 1915.

HENRY FRANCIS LEWIS, '05, lieutenant 34th Battery, Canadian
Expeditionary Force. Died in prison in Bavaria or in
Bavarian Field Hospital.

ERIC WIER MASON, '14, first lieutenant, Siege Artillery, British Army. Died of wound, August 12, 1917.

HARRY A. ROBERTSON, '10, lieutenant, Infantry, Canadian Expeditionary Force. Killed May 11, 1917.

HENRY SOUTHER, '87, assistant chief, Division Aviation. Died at Fort Monroe, Va., August 15, 1917, following surgical operation.

GORDON STEWART, '20, cadet pilot, Army Air Service, A. E. F. Died spinal meningitis, January, 1918, in France.

THOMAS ATKINSON TILLARD, '09, Royal Flying Corps. Killed in action (no date).

KENNETH WEEKS, '12, Foreign Legion in France. Killed June 17, 1915.

***BRAXTON BIGELOW**, '10, captain 170th F. A., British Army. Died July 23, 1917.

*NOTE.—Letter from Mrs. Tracey, aunt of Capt. Braxton Bigelow, to Mrs. George, October 31, 1917.

"Went over the top on July 23, 1917 (night) with eight men after bombing several dugouts. All but two of his men were either disabled or killed. With these two he entered a mine, leaving one man at the entrance and the other later on at a cross-section. He went on with the man he had taken prisoner. The prisoner walked ahead of him. After a while the man at the crossroad heard his voice — then a shot, and followed in the direction Braxton had gone. He found the prisoner, who on being asked where the Captain was, replied by pointing up a mine shaft. That is all any one knows."

Major Bigelow has given up hope, the letter says.

EDUCATION IN WAR TIME

James P. Munroe writes of his work in Washington on the Board of Vocational Education

Organized late in July, the Federal Board for Vocational Education has succeeded, by strenuous labor, in organizing its staff, in determining its fundamental policies, and in certifying, on October 18, the States as entitled to Federal aid for vocational education under the Smith-Hughes Act. At a meeting to be held next week, probably as many more States will be certified, and it is hoped that by December 1, practically all the States will have qualified for Federal aid.

This has involved: conferences, during the last ten days of August, with official representatives from forty-two of the States, for the purpose of taking up, as separate problems, the conditions and needs, so far as concerns vocational education in those States; the preparing of extended memoranda codifying the legal requirements of the Smith-Hughes Act, and defining the principles and policies which, during this initial year, are to govern the action of the Federal Board; the examination, in minute detail, of the plans for vocational education, submitted by each State; the criticism of those plans in the light of the above memoranda; and the re-submission of the plans, thus constructively criticized, for final action by the Board.

Meanwhile, there have been added to the original staff, a Director and four Assistant Directors, appointed in early August, required agents in agriculture and in industry, with headquarters at New York, Atlanta, Indianapolis, Kansas City, and San Francisco, and two agents in home economics, with headquarters, for the present, at Washington.

In addition to this normal work of the Board, it is undertaking the following special duties in connection with the war:

(1) Under authority of the War Department it is organizing the schools of the States for the work of training the men of the second and succeeding, drafts for service as Mechanics, Technicians, etc., under the Signal Corps, the Quartermasters' Corps, the Engineer Corps, and possibly, under other branches of the

service. This involves the mobilization of about seven hundred vocational schools and colleges, public and private, to undertake this special, intensive training, the defining for those schools, in terms of actual teaching, of the various kinds of training required for the army service, and the organizing of the work so that the supply of trained men, while fully equal to the demand, shall not be excessive in any branch or branches. The numbers involved are indicated by the fact that the Signal Corps needs at once 15,000 radio and buzzer operators.

(2) The Board is coöperating with the Shipping Board in the work of determining the fundamentals of the various shipbuilding trades, the fundamentals of the several trades analogous to them, and the nature and extent of the training needed to fit skilled mechanics outside the shipyards for early and efficient service within those yards.

(3) The Board is coöperating with the Surgeon-General's office in the making of far-reaching plans for the vocational rehabilitation of the crippled soldiers after those men shall have been as far as possible rehabilitated physically. This involves elaborate studies of the possibilities for training and for employment of such crippled and blinded men in agriculture, commerce, industry, and the professions, the conclusions varying, of course, with the nature and extent of the handicap, the man's previous vocational experience, and the like. It is most interesting and absorbing work, and the coöperative spirit of the States, of the departments and of the staff is beyond praise.

JAMES P. MUNROE, '82.

THE GOVERNMENT SCHOOLS

Large numbers of aviators already graduated from the
M. I. T. ground schools

The second group in the fifth kind of school organized by the Institute for the United States Government is now at work, the School for Navy Aeronautical Inspectors, with fifty-four reporting for studies. The instruction for the inspectors is based on the needs of the naval aeronauts for inspectors to look after the quality of the work in the manufacture of airplanes for naval use.

In the United States School of Military Aeronautics there have been some twenty-eight or nine squadrons registered and of this number about twenty squadrons have finished their courses and the men are now at one of the flying schools putting into application the principles that they learned at the Institute. Since about twenty-five men are in each squadron the number of men graduated from the Institute work is not far from five hundred.

In the United States Naval Aviation Detachment there have registered at the Institute about a dozen "flights," of which four or five have finished the special work and have gone on to the Navy flying school. The school was established two or three months later than the Army one, and while it has a maximum number of students of from 250 to 300, it has sent out only a small number of flights, perhaps 100 to 150 men.

The schools for Deck Officers which were put into operation by Dean Burton for Mr. Howard and the United States Shipping Board show a total of officers now ready, a good many of whom are already in charge of steamships to the ocean, of a thousand to fifteen hundred.

In the first school for the inspectors of the Naval Aviation Detachment, begun by Professor Peabody, fourteen men were enrolled. The second school has a registration of fifty-four and it is expected that a succession of such schools will be carried on in Cambridge till a considerable group of men have been made competent inspectors. Their courses, which are intensive, include such items as metallurgy and metallography, testing of the strength of materials, methods of delicate measurements, stresses, rigging, together with work with motors and airplanes.

MEMORIAL TO PRESIDENT CRAFTS

The Corporation of the Massachusetts Institute of Technology desires to place upon record its appreciation of the high service rendered, both as a teacher and as an executive, by the late Prof. James Mason Crafts. Of a family distinguished for public service, Mr. Crafts not only was graduated from the Lawrence Scientific School, but had the added advantage of study abroad under men like Bunsen and Wurtz. Returning in 1865, after six years of training in Germany and France, he was appointed, at the founding of Cornell University, Dean of its chemical faculty. In 1870, he succeeded Professor Storer in the chair of General Chemistry at the Institute and devoted himself for several years to the building up of that department. Mainly for reasons of health, Professor Crafts, while retaining, until 1880, a non-resident professorship, lived abroad during a great part of the time from 1874 to 1891, carrying out alone, or in collaboration with Professor Friedel, mainly at l'École des Mines, valuable investigations on the ethers and other compounds of silicon, on thermometry, etc., for which studies he received notable recognition from the French government and from the American Academy of Arts and Sciences.

In 1891, Professor Crafts reassumed official connection with the Institute and soon thereafter was elected a member of the Corporation. In 1893 he became head of the department of Organic Chemistry and later, on the resignation of Professor Drown, head of the entire department. Upon the death of President Walker, in January, 1897, he was elected President of the faculty, and a few months later, President of the Institute. His state of health and his dislike of administrative duties impelled him to resign in 1900, but from that time until his death, on June 20, 1917, he retained a research laboratory at the Institute in which he carried forward work of great value. Preëminently a scholar, Professor Crafts made important contributions in the field of chemical research, and in his comparatively short term as President handled with great skill a number of difficult administrative problems.

BASEBALL IN THE OLD DAYS

The humors and difficulties of the sport as told by a participant in those far-off times

This invitation to me to "reminisce" for the REVIEW on some of the baseball history made during my period at M. I. T., while it finds me perfectly willing, finds me also very much at a loss for material—it's pretty ancient history now and the only way such history can be got at is by digging into the archives—I could dig well enough, but unfortunately I know of scarcely any likely place to dig. Mr. Edmund Grover, a "civic" in my class ('77) is the only repository I know and he has kindly sent me a copy of the scores of three of the games of that period, the record of which he has by chance preserved. I will enclose them, as perhaps they will be of interest to some of the "old timers."

From the Tech which now looks out on the Charles Basin to old Rogers is a far cry and I can imagine that the undergraduate life has changed as materially as have the conditions. We had absolutely no organization for sports in those days, no place to practice and no time for practice, or anything else but work. As an illustration of the amount of work required, let me quote the remark of Professor ——, a classmate of mine, who, when I said to him at a class dinner some twenty-five years later, "They say that they work the students at Tech harder now than they did in our time," tersely replied, "D—— it, they can't."

Starting with that formula, you can imagine how the equation worked out; we could never get the same nine together twice, and we never had room to practice a whole nine, even when by good fortune we could get together a "picked up one." The school year began in October and ended in May—in October the ball season was about finished and in April and May every one was cramming for the "finals."

Nevertheless, there were ball players there and some of us had had outside experience. Grover had been playing with the Klu-Klux of Walpole, a sturdy nine of young farmers and college boys, who caused their adversaries no little trouble and won for themselves a respectable attention. Charles Sumner Bird was a member

of that nine. Rollins had played or was playing with the Beacons of Boston. Gray played a good, stiff game of ball then as he now does of golf (I was up against him last summer and know about it). Plug Evans was a husky western chap and a stone wall at first or third. Eaton was a good fielder, fair complexioned and chubby, with no thought then in his mind of Thompson's Spa. Glover was small, but oh my! active and of good form. Others might not play in the same position twice, but there was no other S. S. For my own part, I was pitching for the Ed-Yans of Canton, a nine which had entered the Massachusetts League of Amateurs, composed as I remember them of the Roll-Stones of Fitchburg, Lowells of Lowell, Live Oaks of Lynn, King Philips of Rockland, Beacons of Boston, Tauntons of Taunton, and Ed-Yans of Canton. Being a "south paw," I had won quite a little success through discovering that I could pitch a "curved ball"—that kind of ball being then generally unexperienced by batters.

Even at that early date, there was some controversy about a player playing in two nines during the same season and that may have been the explanation for my name appearing on the score card as occupying some other position, as will be noticed by the accompanying scores. However, that I pitched in the Harvard and Lowell games, at least a part of the time, I know from the remembrance I have of the unholy joy I experienced—in the Harvard game—of seeing the ball curve off the end of the bat into Joe Gray's hands—"mitt" it would be nowadays; and in the Lowell game from the fact that when I appeared in Lowell later in the season playing in the Amateur League, they tried to bar me as being "that d— Institute pitcher." Well, that Harvard game was the only one that I ever remember the Institute as winning. It was a proud moment however—that game—and I can recall the thrill it gave me to have some of the under-classmen dispute for the privilege of carrying home my travelling bag and paraphernalia. There were other games, of course, but of such little importance that my memory is not impressed by them. In fact, the sporting spirit of the Institute of that day was almost nil; one could count upon the fingers the sporting events of a four-years course, though perhaps on that account what little there was remained clear in mind.

At some previous period, there must have been a uniformed nine at Tech for, by some means—I have forgotten what—I became

possessed of a somewhat faded uniform of a color somewhere between a khaki and a silver gray, the shirt embroidered with an "old English" T worked with a lavender floss. I have also forgotten whether there were enough garments to supply the whole nine but I know that a number of the boys wore them. The color of that uniform serves to emphasize the old adage that "coming events cast their shadows before" for I remember a day not long after when '77 held a class meeting to ratify the Tech colors—silver gray and cardinal.

In your request for an article you asked for a photograph of some one of the Institute teams of our day. I am not aware of any in existence; it is to be remembered that cameras were not so ubiquitous in those days and it is doubtful if we could have kept a team together long enough to be photographed.

Our Concord sage has somewhere said, "So soon that I was done for, I wonder what I was begun for," and should any reader make a like conclusion regarding this snapshot at events which happened more than forty years ago, I beg to suggest that this was not a voluntary offering on my part—simply it was asked for by the Editor—and therefore not mine the right to reason why, but rather to do or die.

M. I. T. BASEBALL, CLASS OF '77

Pos.	HARVARD	A. B.	O.	R.	B.H.	Pos.	M. I. T.	A. B.	O.	R.	B.H.
s.s.	Stackpole	5	3	2	1	r.f.	Paul, '78	5	4	1	1
2b.	Thayer	5	3	2	2, 1	c.	Gray, '77	6	5	0	
p.	Hastings	5	4	1		3b.	Evans, '77	5	4	1	
1b.	Harding	5	3	0	2	s.s.	Glover, '77	5	2	2	2, 1
3b.	Adams	5	2	2	1	2b.	Burnet '76	4	3	1	1
l.f.	Page	4	2	1		c.f.	Eaton, '78	4	4	0	
r.f.	Memrath	4	3	1	1	p.	Grover, '77	4	2	2	1
c.f.	Werherber	4	3	1	1, 1	l.f.	Capen, '77	4	1	3	1, 1
c.	O'Connor	5	4	0	1	1b.	Webster '76	4	2	1	

Innings	1	2	3	4	5	6	7	8	9	Total
Harvard, '78	1	4	0	1	2	0	1	1	0	10
M. I. T.	0	2	0	1	4	2	0	2	0	11

Jarvis Field, Cambridge, Saturday, October 31, 1874. Time, 2 hours, 5 minutes.
 Umpire: John F. Kent, captain Harvard Varsity.
 Scorer: Robert H. Allen, M. I. T. '75, Architect. (Afterwards drowned swimming Hudson River at Newburg, July 3, 1876.)

M. I. T. BASEBALL, CLASS OF '77

Pos.	LOWELL	A. B.	O.	R.	B. H.	Pos.	M. I. T.	A. B.	O.	R.	B. H.
3b.	Woodhend	6		3	4	s.s.	Glover	5	3	1	2
l.f.	Doyle	6		4	2	l.b.	Evans	4	4	0	0
c.	Brown	6		3	2	l.f.	Tully, '78	4	3	0	0
s.s.	Enright	5		2	1	3b.	Paul, '78	4	3	0	1
1b.	Cook	6		3	2	2b.	Burnett, '76	4	3	0	2
r.f.	Fox	4		2	0	c.f.	Rollins, '78	4	1	2	0
2b.	Wentworth	4		2	1	r.f.	Capen	4	3	1	0
c.f.	White	4		1	2	c.	Gray	4	2	2	2
p.	Rule	5		2	0	p.	Grover	4	3	0	1

Innings	1	2	3	4	5	6	7	8	9	Total
Lowell	1	1	1	5	9	0	4	1		22
M. I. T.	1	2	0	3	0	0	0	0		6

Lowell Fair Grounds, May, 1875.

Innings	1	2	3	4	5	6	7	8	9	Total
Beacon	2	13	1	3	4	5	3	2	1	34
M. I. T.	1	0	0	0	0	1	0	0	2	4

Capen and Grover retired in mid-game; Henshaw and Ketcham, subs.
Brookline, May 8, 1875.

G. WALTER CAPEN, Course IV, Class '77.

NEW MEMBERS OF THE ALUMNI ASSOCIATION

The following have been elected members of the Alumni Association: Warren Ames, '16; Horace Leslie Bickford, '16; Theodore Adolph Bulifant, '16; Elliot Fairfield Coolidge, '16; Lawrence H. Delabarre, '16; Lawrence F. Edgerton, '16; Charles S. Emerson, M.D., '16; George Malpass Grubnau, '16; James Beecher Hobbs, '16; Mrs. Marie Iasigi Taveau, '16; Thomas Green Jewett, Jr., '16; Emory Leopold Kemp, '16; Albert Michael Lovenberg, '16; Garfield Merton Newcombe, '16; Alfred S. Nibecker, Jr., '16; Louis Plitt Smeltzer, '16; Bayard H. Waterbury, '14; Donald H. Choate, '16; Arthur Leighton Guptill, '16; Lee Hall Jones, '16; Benzo Katsura, '10; Harold Adam Moxon, '16; Olen Carter Norris, '16; Charles Marcus Osborn, '16; Earle Fletcher Pearson, '16; Hazel Elizabeth Roberts, '16; Prince S. Crowell, '05; Horace E. Hall, '16; Frank Shepard Hunt, '16; Frank Douglas Ross, '16; Harry Edward Whittemore, '16; LeRoy W. Wilson, '16; Charles J. Conway, '04; Herbert A. Folsom, '97; Carlin Forrest Harrington, '16; Raymond M. Hughes, '98; John C. Monahan, '16.

THE TECHNOLOGY CLUB OF FORTRESS MONROE

(Extract from a Letter, December 10, 1917)

It appears that there are in the vicinity of 40 Technology men here at this camp. There are 320 men here at present. So 40/320 is a fair percentage. There is no other college or institute that can come anywhere near us in number (we won't boast of quality till later), so we organized Technology's latest Alumni Club.

Sunday evening twenty of us gathered at the Hotel Chamberlin here on the post for a (welcome) change of diet from regular army mess. After our "feast" (eyes included) we organized what I believe we will call the Fortress Monroe Technology Club.

Those present at the dinner and meeting were: T. D. Brophy, '16; L. I. Noyes, '17; D. L. Patten, '17; A. Abrams, '18; L. H. Merrill, '19; P. Hatch, '16; H. F. O'Donnell, '18; G. A. Hunt, '17; W. J. Wolfe, '16; Aldrin, '17; F. C. Harlow, '17; C. M. Black, '16; F. T. Ingraham, '16; W. P. Ryan, '18; W. B. Strong, '17; G. H. Gaus, '17; R. E. DeMerritt, '17; J. M. Evans, '16; J. M. Ralston, '16; C. E. Ames, '17; C. Miller, '17; M. M. Read, '18; S. H. Franklin, '18; Hamilton, '18; R. J. Miskovsky, '17; H. Y. Keeler, '18; H. R. Crowell, '15; Swain (S. S. and S. C.), E. C. Gere, '13. With the exception of Gere, '13, all are in the present camp. There are also several men stationed here who are from Technology. A. C. "Buck" Dorrance is a captain on the Post, as are Green and Perry of the Electrical Department. Hope to have all of the names later for you. Thus we 29 organized. "Steve" Brophy, '16, was chosen president and I, "Lin" Noyes, '17, was dubbed secretary-treasurer—fortunate for me, perhaps, for being "broke," the dues may help!

We plan to take club rooms at the Hotel Chamberlin and make that our week-end home during our stay, which we understand has been pronounced a four-months sentence.

With regard to all (including the faculty) and good luck, I am

Sincerely,

LINWOOD I. NOYES, *Second Lieutenant, C. A. C.*
Secretary-Treasurer, Fortress Monroe Technology Club.

PROFESSOR ALLEN TO VISIT ALUMNI ORGANIZATIONS

To tell local organizations of Institute's war activities

Prof. C. Frank Allen, retired, of the Institute, started on January 18 on a tour of some three thousand miles to visit the local associations of Technology in the different northern cities of the country. His itinerary includes Schenectady, Syracuse, Detroit, Chicago, Minneapolis, Kansas City and St. Louis. On his return he will undertake a similar trip through the Southern States and will visit altogether some seventeen of the M. I. T. alumni organizations. Trips of this kind are a regular service undertaken by the parent Association in Boston to keep the former students in touch with the Technology of today. Professor Allen will speak of the numerous war activities of the Institute, as well as of the more peaceful matters of the ordinary curriculum, the Walker Memorial and the government of the dormitories.

Professor Allen is a native of Massachusetts and a graduate of the Massachusetts Institute of Technology in the Class of 1872. He has been for more than thirty years a member of the faculty of the Institute and retired a year ago under the provisions of the Carnegie Foundation. Following graduation, he had a varied experience, being connected with the water systems of different Eastern municipalities, Providence, Newton and Boston among them. In 1878 he went West and for seven years was assistant engineer of the Atchison, Topeka and Sante Fe R.R., being for a year of the time the chief engineer of the waterworks of Las Vegas. In addition to his work as an engineer he took up the study of the law and was admitted to the bar in New Mexico in 1885 and in Massachusetts in 1901. Incidentally he was city attorney for Socorro, N. M., for a year.

In 1885 he was appointed assistant professor of Railway Engineering at the M. I. T.; in 1887 he was named associate professor, and since 1896 he has been professor. His legal training made him especially valuable in matters of contracts and specifications and he has been one of the most important authorities in developing the legal side of engineering instruction. His books have been the standards everywhere.

Besides his teaching, Professor Allen has undertaken a good deal of public and association work. He has been a member and chairman of the school committee of his home town, Sharon, Mass., a member and ex-president of the Massachusetts Highway Association and of the New England Railway Club, a member of the American Statistical Association and ex-secretary and ex-president of the Society for the Promotion of Engineering Education. He has been in the editorial chair of a number of engineering and Technology publications. He is bringing to local Tech clubs the gossip of the doings at the Institute, which in these times are strongly flavored with helpfulness to the Government.

TECHNOLOGY MEN IN PARIS HOLD DINNER

First of series to be given in University Club of Paris—
Seventeen Institute men attended

On Saturday night, December 1, the first of the series of monthly Tech dinners was given at the American University Union in Europe. Seventeen Institute men and their friends were present, and, thanks to Mr. C. H. Mower, '88, the chairman, it was a very enjoyable occasion. After the dinner, Major Brigham, '08, of Harvard, now in the Engineers Corps, gave a very interesting and instructive talk on light railways and their use in the present war, illustrated by lantern slides. The talks are open to any one interested and many men staying at the Union attended. Definite plans for the next dinner, which is to be held the first Saturday in January, are not yet completed, but will be announced soon.

Those present at the last dinner were: Mr. C. H. Mower, '88, chairman; Mr. V. R. Lansingh, '98; Maj. J. C. Riley, '98; Mr. Paul de B. Laighton, '95; Mr. H. A. Higbie, '10; Dr. Paul Van Dyke, Princeton, '81; Prof. G. A. Nettleton, Yale, '96; Maj. Stowell Gill, '97; Maj. Brigham, Harvard, '08; Lieut. M. R. Scharff, '09; Mr. F. N. Breed, '12; Mr. J. C. Johnson, Carnegie, Tech '15; Mr. H. P. Tray, '16; Mr. L. B. Cahill, '19; Lieut. F. G. Puriton, '15; Mr. G. W. Root, '19; and Mr. R. M. Allen, '16.

It was voted at a Tech dinner, held last November, to hold monthly meetings at the Union Club House and Mr. C. H. Mower was appointed chairman. Mr. Mower has provided a year's program in advance, and at each monthly dinner an illustrated talk or address in English will be given by some noted authority, American, French or British, on the subject on which he is an expert. The list of subjects to be covered, alphabetically arranged, is as follows: Airplanes, Naval and Military; Artillery, Heavy and Light; Automobiles, Tractors, Trucks, etc.; Engineers, Bridge, Electric Lighting, Searchlights, Trench Construction, Mines, Water Distribution, etc.; Gas and Liquid Fire; Machine Guns, Rifles, Hand Grenades, etc.; Medical and Sanitary, Hospitals, Ambulances, etc.; Political Aspects of the War; Quartermaster's Department and Ordnance; Railroads, Main

Line, Narrow Gauge; Salvage of the War; Sea Transportation; Submarines, Destroyers, etc.; Tanks.

According to the statements made by the men who have written of their experiences abroad, the American University Union is a great success. All of the rooms are taken, and the resources of the restaurant are taxed to the utmost, many men who do not live in the house registering at the Union and visiting their various bureaus. It fills a great need for college men in Paris, whether they are in war service or not.

Its location is peculiarly favorable in these days of limited transportation facilities. At the head of the Avenue de l'Opera, it is in the very heart of Paris, and can be reached by two lines of the Metropolitan subway which meet at the station Palais Royal. You can imagine the relief of the man unfamiliar with Paris and continental customs at finding himself in a hotel where he will no doubt meet friends and where he will be served by English-speaking employees who understand his wants and his manner of expressing them. The Union has the comfortable atmosphere of a clubhouse, and the friendly relations among the people partaking of its hospitality are becoming closer and more apparent from day to day.

The hotel is thoroughly modern, the rooms comfortable, the food excellent, and for prices amazingly reasonable. A great luxury for the men returning from months of weary service at the front is a constant supply of hot and cold water and a large number of bathrooms.

The special college bureaus, housed in a series of identical suites on the five upper floors, are coördinating their work with that of the Union, avoiding thereby duplication and waste. Their activities will naturally vary considerably, according to the number of men they are caring for and the size of the office force at their disposal. The men who have come to the Technology Bureau have wanted cables sent, have wished to have the addresses of good pensions, and to be recommended to French teachers who could give them intensive instruction for their short stay in Paris. In addition to this, the number of small services for men who have little or no knowledge of French is very great, and is increasing every day. To date, the bureau has been able to accomplish all of them.

MISCELLANEOUS CLIPPINGS

Editorial comment on the McKay decision

How badly the "dead hand" needs a live pulse to guide it is shown in the decision over the McKay millions. When Gordon McKay willed to Harvard, for a scientific school, his million-dollar starter **The Dead Hand Again** toward an ultimate \$30,000,000 endowment, he did not foresee the Tech merger and left no loophole for a change of plan. Now Harvard would like to transfer the money to Tech, but under the law it can't. And of course it has no desire to duplicate Tech's work, which would be folly.

How much better the Cleveland plan! In Cleveland a liberal banker, Fred Goff, has organized a public service fund into which the generous rich can drain their surplus, assured that after their departure their money will be used, upon the whole, wisely. Is such assurance possible? you ask. Well, here is Goff's method — judge for yourself:

There are five trustees, three chosen by the public. They have to make a detailed yearly accounting by public advertisement and are removable for cause. They keep a continuous survey of their community's public affairs, especially those relating to education and philanthropy; and thus are informed when a useful agency begins to sag. They rush their reserves of wealth to its support as a general sends men to a staggering army, and they are free to shift the emphasis as the needs of the times change.

Plainly, Gordon McKay should have put his money under an elastic control, for no man can wisely prescribe for the remote future. It is questionable how far public policy should permit a man, however good his intentions, to tie the hands of succeeding generations by deeds of trust which crush the living in a rigid clasp by the dead.—*Cleveland Plain Dealer*.

Not the least unfortunate phase of a wholly unfortunate condition of things is the possibility that the McKay will decision, which nullifies the **Good Feeling** agreement between Harvard and Technology, may also interfere somewhat with that splendid effort to effect complete harmony between the officials of the two institutions and their respective student bodies. Years ago—and not so many years, either—the sight of the crimson of Harvard made the Tech man see red. Street fights between the students of the University and the Institute were not uncommon. On certain occasions, indeed, they were always expected. A return to such conditions is naturally out of the question, but the dissolution of the new merger and the probable creating by Harvard of another engineering school may check somewhat the process which looks to the cementing of good relations between Harvard men and Tech men. Now that both institutions are located in the same city, the students of each ought to have only the friendliest of feelings for the students of the other.—*Boston Transcript*.

The Snag Had the benefactor given more leeway in respect to the medium for the use of the funds — had he made it plain that all he desired was that the University should assume moral responsibility that the money should be employed wisely for the ends prescribed — the arrangement would have encountered no such snag. On the other hand, if he had not been insistent that the endowment should be used for certain designated ends, it might have been employed to good advantage for some work directly within the scope of Harvard's plans, as they have come to take shape. But it was his purpose that the money should be used for a specific line of work, to be administered by a particular agency named by him, and he evidently supposed the University was fully agreeable to this arrangement. If the benefactor were still living, a satisfactory solution of the difficulty could perhaps be speedily effected. As it is, there is a pronounced lack of accord between that which the University seems obligated to do and that which sound economy dictates.—*Springfield Union.*

Law and Common Sense From the educational standpoint, and on the ground of economic considerations, the merger between the institutions was eminently desirable, but the court rules that such co-operation is not in accord with Mr. McKay's purpose and will, and so renders it invalid. That this will be a bitter disappointment to both of the parties in interest is obvious. This co-ordinating with Harvard was a large factor in the removal of the Institute of Technology to the banks of the Charles in Cambridge, because three-fifths of the income from the McKay endowment was to be devoted to the maintenance of the engineering department in whose teaching professors of both institutions share. The court does not accept the view urged upon it that "the school of applied science on the Charles River is a Harvard School, a department of Harvard University." It found that students register for these courses only at the Institute, and that Tech and not Harvard is the authority in control.

The effect of the decision would seem to be to force Harvard to re-establish a school of applied science, under the administration of its overseers, and probably with buildings located in the group at Harvard Square. So would be compelled such duplication of buildings and professors as it was hoped to avoid, for there seems no escape from the legal situation which has been established. It is a pity that law and common sense could not have been made to coincide in this matter.—*Springfield Republican.*

A Nut to Crack From the educational point of view this is unquestionably a regrettable outcome. Eight years after Harvard received the first four millions of the McKay bequest and established its Graduate School of Applied Science, with a view to making it serve science as the Harvard Law School and the Harvard Medical School are serving their branches of education, the new school had attracted less than sixty graduate students, while there were at the same time two hundred and fifty graduate students seeking the higher degrees offered by

the Technology. When the merger was decided upon, Harvard transferred all its professors of civil, mechanical, mining, electrical, and sanitary engineering to the Institute, and prepared to abandon all form of scientific instruction. Now that this plan is wrecked, the Harvard authorities must sit down to face an uncomfortable and difficult situation and to undo whatever they may have done in conjunction with the Institute of Technology since the agreement was entered into.

Shall there be a renewal of the efforts to bring about an actual union of these two great schools? President Eliot favored it in 1904 and 1905 to the extent that he desired the physical removal of the Institute to Harvard to bear a relationship towards the University such as the colleges of Oxford and Cambridge bear towards those universities. This was bitterly opposed by the graduates of the Institute, who insist that it shall keep its separate entity. Since that time the Institute has erected its splendid new buildings on the bank of the Charles, has raised large sums of money, and received some State aid. It is altogether probable, therefore, that any effort to revive President Eliot's scheme or one like it will fail. The court's decision makes it plain that the Institute cannot receive any of Gordon McKay's money unless it is actually as much under the control of the Harvard governing bodies as are the Law School and the Medical School.

What, then, shall Harvard do? Perhaps there is a possibility of a subdivision of the field of science. New departments and new needs are constantly arising. Thus, at the Institute they are just establishing a great department of marine architecture in consonance with the nation's new plans for a mercantile marine. For some time past the Institute has been specializing in matters of aviation, even before the United States entered the war. It would seem, therefore, as if Harvard might select certain branches of science for its own and reach a friendly agreement with the Institute in regard thereto. Whether anything like the present arrangement of having individual students carried simultaneously as attending both institutions can be again worked out is difficult to foretell. But if some such compromise is not arrived at, Harvard is likely to duplicate the Institute needlessly, or to suffer from "undigested" millions and be recreant to her solemnly accepted trust. For by 1956 the McKay money will amount to no less than twenty-three millions, some authorities even predicting that it will reach thirty millions by that time. Here is a nut to crack which will try to the utmost Cambridge administrative genius.

—*The Evening Post.*

Professor Ames was one of a commission of six which visited the western front last spring and summer to study the relation of science to war, with a **Harvard's Viewpoint** view to helping the Government in all scientific matters. His report upon what they saw bears out to a remarkable degree the contention of the Harvard scientists that the war is throwing a new light upon the objects of scientific education and bringing the expert in pure science amazingly into his own. The geologist, the meteorologist, the chemist, the metallurgist, the physicist, all are seen at work. The point of special bearing is found in Professor Ames's con-

cluding words: "I have not said anything regarding engineering as such. To me it is impossible to draw any line between this science and the so-called pure sciences. All applications of science are based directly upon experiments and investigations in scientific laboratories; and there is no discovery either of fact or of method which may not be used in connection with daily life. This is specially true of this abnormal life which we call war."

The upshot of the matter appears to be that the war, working its changes in a thousand directions, is calling for a revised and enlarged definition of the term "applied science"; and that plans for its most beneficent furtherance may accordingly be laid with a clearer vision and understanding today than ever before. It is for this reason that more is to be hoped from the next plan for the employment of the McKay fund than from any that have gone before.—*Harvard Alumni Bulletin*.

It is an energetic and helpful course pursued by the Massachusetts Institute of Technology, in deciding to begin at once the construction of the **The Pratt School** new building for the School of Naval Architecture and Marine Engineering, for which nearly a million dollars are available from the estate of the late Charles Herbert Pratt. Additional costs of building operations are as nothing compared to the additional demand placed upon the naval and marine resources of the United States by the world war. And that increased demand is not alone for ships, but for men who can design ships, build ships, manage them, operate them — all experts of the kind which this particular school trains and equips for their various duties.

Last summer, the School made a special contribution to the war needs of the country when it provided an intensive course for sixty men who had already received such thorough grounding in technological work that this additional training prepared them for immediate use by the Navy Department in important positions that must otherwise have gone unfilled. Such special efforts as this will be repeated, and for their proper accomplishment enlarged quarters, of the kind Mr. Pratt's generosity makes possible, will be much needed. There is no certainty that they will be ready for occupancy before the next school year, but in war time the only thing to do is to begin — not to postpone beginning merely because one is not pre-assured that one will finish in the desired season. The construction of sufficiently heavy artillery was delayed for nearly two years in France simply because the high command hesitated to undertake the tremendous program involved.—*Boston Transcript*.

In months past the admiring eyes of Boston and vicinity have been on the architectural wonders of the Massachusetts Institute of Technology. **Our New Airdrome** Walker Hall, with its magnificent court, the library, the dormitories and the President's house all came in for their share of praise, and everybody was glad that the men of Tech were to be adequately housed.

But later, when the war broke and the great rooms of Tech were placed at the disposal of men who researched and investigated and when embryo air mechanics and aviators stepped in to do their bit at the place that seemed most proper, they found themselves handicapped by lack of facilities. The airplane work, especially, suffered in consequence, and the boys had to be content to mount their planes in the laboratory and a few old sheds near by, which was far from satisfactory. Indeed, most of them envied the men who could go to Squantum and Pensacola, where the facilities were better and where there was no "parlor assembling."

So, now, the six hundred men who courageously did their bit under these discouraging conditions are to be rewarded, for the Institute, acting in co-operation with the War Department, is making extensive plans for a new airdrome to be built on the new Tech ground. There the boys can dissect, reconstruct and suspend airplanes to their hearts' content. In fact, they will be able to do everything except high flying, which should put them in good mood for that big drive at Kiel next summer.—*Boston Advertiser.*

At the Massachusetts Institute of Technology, Boston, Mass., faculty action at the last meeting is of greatest consequence in placing the Institute in still better position to do service for the country. In the and in defining more directly the value to the students Sun— of whatever extra work they may have undertaken during the summer. In addition, there were started at the meeting movements which when a little more developed will make of Technology officially what it was in fact the last school year, an all-the-year-round institution.

Those who have been familiar with the great number of activities of the Institute and students last summer will realize that Technology has not been asleep. With the intensive courses, the cram courses for the students who wished to take military examinations, the two student camps, sophomore and junior, it was all summer long a hive of industry with a student attendance of its regularly registered men of nearly half the normal in season number. The burning question among the students has been whether such work will be recognized anywhere, and so far as the juniors are concerned is answered by the faculty vote. This is to the effect that the juniors who took special summer work and who are now taking intensive courses meant to cover both terms of the senior year in one term and who leave the Institute not earlier than January 1, 1918, will be recommended for degrees without waiting for the regular time in June. This will permit the placing of a goodly group of technically trained men in service for the country without loss of standing or delay in the conferring of degrees which the technical regulations of the school might suggest. Tech will graduate in January those seniors who have completed the necessary work on recommendation by the heads of the departments in which they are studying.

Important as is this action of early graduation, it is really second in importance to that which seeks to place the Institute faculty and courses of

instruction in the best possible position for early furnishing aid to the Government. There are two matters here under consideration, the details of which remain still to be developed. First, there is the proposition to maintain the Massachusetts Institute of Technology as a "continuous performance," to have it quite as active in summer as in winter. This condition is not usual in such special schools, but since September, 1915, Technology has not for an instant closed its doors and has kept in attendance almost the whole of its faculty, and has maintained continuous courses. The present action is to recognize the existence of this fact and give it permanent form during the continuance of the war.

The second phase of helpfulness under consideration is the establishment of intensive courses in every department. In naval architecture and in the study of internal combustion engines there have been intensive courses in the past besides the "cram" courses intended to help those wishing to enter service by giving special attention to special features likely to come up in those examinations. Today every head of a department at the Institute has before him the problem of what he can do in the way of arranging short intensive courses that will be helpful in the prosecution of the war. It does not need to be said that when the plannings have been completed the faculty will lose no time in establishing these courses.—*New York Sun*.

"President Maclaurin of the Massachusetts Institute of Technology, as well as many of the members of the faculty, is laboring to bring together **Getting Together** the various schools now in progress at the Institute and to produce some sort of unity. Each unit has, up to now, been more or less self-sufficient and there has been no intermingling even among the two aviation schools, naval and army. It is expected that the president will speak to the entering class at the aviation school each week and that other members of the faculty will also address these men from time to time, thus bringing about a more unified Technology before spring."

This paragraph appears in one of the Boston newspapers. It suggests a most desirable move. Technology is a great center of war preparation on the side of technical skill, and various groups of young men are fitting for one form of national service and another. All intent upon the one object of expressing their patriotism and helping to advance the cause of the nation, they are so much a part of one great whole that it seems anomalous that they should be detached and separate groups within the school. The quicker they are brought together into "some sort of unity," the better for the development of the civic sense.

Of course, Technology is a great institution, with necessarily many diversified interests — but so is any civic community, and it is not tolerable in this day that a progressive community should lack unity. The keynote of successful operation is co-operation of all the parts, with that made possible by a fine, big, get-together spirit. — *New Bedford Standard*.

In the "contributors' column" of the December *Atlantic* a curious story is told — a story sent to the editor of that magazine by a Belgian officer, **A Lesson in Reprisals** a graduate of the Massachusetts Institute of Technology now in his own army after seeing service with the Canadian forces. He tells of the constant harassing by aerial raiders of the Channel ports near where he is stationed, and of one such attack that was a really notable achievement.

"As a rule," he writes, "no military damage is done and the casualties are mostly civilian, and that makes the horrible part of it. . . . However, sometimes mistakes happen. Lately by moonlight, a German plane saw a column of troops on the road; he successfully dropped two bombs, killing twenty-nine men and wounding forty-one. It was a fine shot, all the more so that the column of troops were German prisoners being led back from work." And the editor's correspondent adds quietly: "The British gave them a nice military funeral, with all their German prisoners made to attend."

The advocates of "reprisals in kind" may well ponder this episode. It is not at all likely that the aviators of the Allies could ever be any more nearly sure than was the German in this case that the target at which they aimed was of military importance, and therefore legitimately to be destroyed if inanimate or killed if living. The emotions of the prisoners who attended the funeral of their countrymen, victims of a mistake that was most horrible, from their point of view, can be imagined. Equally easy is it to imagine the emotions of the civilian inhabitants of the French or Belgian city, as they, too, watched the ceremony and compared it with others that had marked the burial of women and children who had met a like fate in previous raids.

Presumably the German airman, on returning to his camp, made a proud report of his achievement, and probably he received for it another decoration or title. He had done his best to earn it.—*New York Times*.

OFFICERS OF THE LOCAL ALUMNI ASSOCIATIONS

Following is a list of the officers of the local Alumni Associations, and of the Technology Clubs Associated:

Technology Clubs Associated: President, Hollis Godfrey, '98, Philadelphia, Penn.; vice-presidents, P. S. duPont, '90, Wilmington, Del., Charles G. Hyde, '96, San Francisco, Cal., Henry M. Waite, '90, Dayton, O., Edmund Hayes, '96, Buffalo, N. Y.; secretary-treasurer, Walter Humphreys, '97, Massachusetts Institute of Technology, Cambridge, Mass.; assistant secretary, Eugene S. Foljambe, '01, Philadelphia, Penn.

Akron—M. I. T. Club of Akron, Ohio: President, R. W. Ferris, '08, 1; secretary-treasurer, W. H. Fleming, '16, 49 Hurlburt Avenue, Akron, Ohio; chairman of the Executive Committee, J. H. Kittridge, '94.

Albany—Technology Club of Eastern New York: President, N. J. Kingsbury, '02; first vice-president, E. H. Sargent, '07; second vice-president, Robert Palmer, '04; secretary-treasurer, C. N. Draper, '07, General Electric Co., Schenectady, N. Y.

Atlanta—Atlanta Association of M. I. T.: President, H. R. Bates, '94; secretary, William J. Sayward, '01, 633 Chandler Building, Atlanta, Ga.

Birmingham—Southeastern Technology Association: President, W. E. Mitchell, '03; secretary, Fernand C. Weiss, '13, Alabama Power Co., Birmingham, Ala.; Alumni Council representative, Harold S. Wonson, '07.

Boston—Technology Club of Boston: President, Samuel C. Prescott, '94; vice-president, Dwight Porter; secretary, Robert S. Williams, '02, M. I. T., Cambridge, Mass.; treasurer, Andrew D. MacLachlan, '96.

Bridgeport—Technology Club of Bridgeport: President, Edward G. Gallagher, '00; secretary, Howard L. Stone, '14, 400 Ogden Street, Bridgeport, Conn.; treasurer, Lawrence B. Walker, '12; committee on proceedings, Walter D. Allen, '11, Max L. Waterman, '13, D. C. Ramsey, '15; local mobilization committee, R. H. Leach, '00, H. T. Smith, '98, G. M. Macdonald, '03, J. F. Johnson, '11.

Buffalo—Technology Club of Buffalo: President, Daniel F. Potter, '92; secretary, Earl Root, '11, Buffalo Standard Ink Co., Buffalo, N. Y.

Butte—Technology Association of Montana: President, Charles W. Goodale, '75; secretary-treasurer, Charles D. Demond, '93, 704 Main Street, Anaconda, Mont.

Chicago—Technology Club of Chicago: President, F. F. Fowle, '99; vice-president, William T. Blunt, '74; secretary, Harvey S. Pardee, '09, 111 W. Washington Street, Chicago, Ill.; directors, W. W. De Berard, '01, Harry L. Grant, '01, D. A. Thomlinson, '12.

Chile—Technology Club of Chile: Secretary, Joe Livermore, '15, Braden Copper Co., Rancagua, Chile.

China—Technology Club of China: No report returned.

Cincinnati—The Cincinnati M. I. T. Club: President, Stuart R. Miller, '07; vice-president, George A. Cowing, '01; secretary, Charles F. Cellarius, '16, 3843 Forest Avenue, Norwood, Ohio; treasurer, Charles R. Strong, '11; Alumni Council representative, Herbert M. Davies, '93; executive committee, president, vice-president, secretary, treasurer, H. D. Loring, '06, Herman W. Lackman, '05, Frank W. Willey, '08.

Cleveland—Technology Club of Northern Ohio: No report.

Connecticut—Connecticut Valley Technology Association: President, Edmund P. Marsh, '89; vice-president, Clarence E. Whitney, '91; secretary-treasurer, Ernest W. Pelton, '03, 77 Forest Street, New Britain, Conn.; Alumni Council representative, Eben S. Stevens, '68.

Dayton—Dayton Technology Association: President, Walter G. Wuichet, '89; vice-president, Henry M. Waite, '90; secretary-treasurer, Carlton S. Putnam, '08, 1010 Schwind Building, Dayton, Ohio; Alumni Council representative, Charles F. Park, '92.

Denver—Rocky Mountain Technology Club: No report returned.

Detroit—Detroit Technology Association: President, Marrine Gorham, '93; vice-president, Orton W. Albee, '93; secretary, D. V. Williamson, '10, Detroit Gear & Machine Co., Franklin Street, Detroit, Mich.; Alumni Council representative, Everett Morss, '85; finance committee chairman, N. S. Dennett, '11; entertainment committee chairman, H. S. Morse, '03.

Duluth—Technology Club of Lake Superior: No report.

Fall River—Technology Club of Fall River: President, Charles H. Warner, '89; secretary-treasurer, Arthur E. Hirst, '13, 55 Madison Street, Fall River, Mass.; executive committee, president, secretary-treasurer, William H. Eddy, '85, Abbott E. Slade, '75, John Brown, '00.

Harrisburg—Technology Club of Central Pennsylvania: No report returned.

Hartford—Technology Club of Hartford: President, John H. Fellows, '06; vice-president, Harry E. Dart, '01; secretary-treasurer, George W. Baker, '92, Box 983, Hartford, Conn.; Alumni Council representative, G. H. Gleason, '03; board of governors, the president, vice-president, secretary-treasurer, Charles P. Waterman, '03, Atwood C. Page, '10.

Hawaii—Technology Club of Hawaii: No report returned.

Indianapolis—Indiana Association of the M. I. T.: President, J. Lloyd Wayne, 3d, '96; secretary, Wilson B. Parker, '88, 805 Board of Trade Building, Indianapolis, Ind.

Japan—Technology Association of Japan: No report returned.

Kansas City, Mo.—Southwestern Association of the M. I. T.: President, Frank Cushman, Jr., '01; vice-president, Albert E. Lombard, '02; secretary-treasurer, Hermann C. Henrici, '06, 222 Commerce Street, Trust Building, Kansas City, Mo.; Alumni Council representative, W. Lyman Underwood, '98.

Lawrence-Lowell—Technology Club of the Merrimack Valley: President, Edgar N. Barker, '96; vice-president, George F. Russell, '89; secretary, John A. Collins, Jr., '97, 67 Thorndyke Street, Lawrence, Mass.; treasurer, William O. Hildreth, '87; Alumni Council representative, Richard A. Hale, '77; executive committee, president, vice-president, treasurer, secretary, George H. Perkins, '99.

Los Angeles—Technology Club of Southern California: No report returned.

Louisville—Technology Club of Louisville: No report returned.

Manchester—Technology Club of New Hampshire: President, Edward W. Rollins, '71; vice-president, Norwin S. Bean, '94; secretary, Walter D. Davol, '06, Amoskeag Bank Building, Manchester, New Hampshire; Alumni Council representative, Andrew Fisher, Jr., '05.

Milwaukee—Technology Club of Milwaukee: Secretary, J. F. Blackie, '04, Milwaukee Gas & Coke Co., Milwaukee, Wis.; Alumni Association representative, George C. Wales, '89.

Minneapolis—Technology Association of Minnesota: President, Frederick M. Mann, '94; secretary-treasurer, Willis R. Salisbury, '12, care Salisbury & Satterlee Co., Minneapolis, Minn.

Montreal—Technology Club of Lower Canada: No report returned.

New Bedford—Technology Club of New Bedford: President, James E. Stetson, '99; secretary-treasurer, Richard D. Chase, '92, 607 Purchase Street, New Bedford, Mass.; secretary *pro tem*, Charles F. Wing, Jr., '98, 36 Purchase Street, New Bedford, Mass.; Alumni Association representative, Charles F. Lawton, '77; executive committee, president, secretary-treasurer, Fred E. Earle, '06.

New Orleans—Technology Club of the South: Secretary, John O'Neill, '10, writes that the club is "pretty well broken up."

New York—Technology Club of New York: President, Ira Abbott, '81; vice-presidents, Edward W. Edgerly, '98, Edward M. Hagar, '93, E. C. Lufkin, '86, Clifton W. Wilder, '98; treasurer, Frank C. Schmitz, '95; assistant treasurer, William A. Evans, '04; secretary, Thomas C. Desmond, '09, 17 Gramercy Park, New York, N. Y.

Paris—Technology Bureau of the American University Union of Paris: Director, Van Rensselaer Lansingh, '98; acting director, Robert M. Allen, '16, 8 Rue de Richelieu, Palais Royal Hotel, Paris, France.

Peking—Technology Club of Peking: President, Dr. Wen, '08; secretary-treasurer, Ziang Yien Chow, '14, Bureau of Municipal Administration, Department of Surveying, Peking, China.

Philadelphia—Technology Club of Philadelphia: President, H. H. Terrell, '07; vice-president, P. E. Tillson, '06; secretary-treasurer, N. A. White, '06, Wenonah, N. J.; executive committee, president, vice-president, secretary-treasurer, D. K. Bullens, '09, C. J. Walton, '14, H. L. Moody, '07, E. P. Trask, '99, E. E. Pierce, '99, H. L. Walker, '05, F. B. Barris, '15.

Pittsburg—Pittsburg Association of the M. I. T.: No report returned.

Pittsfield—Berkshire County Alumni Association of the M. I. T.: No report returned.

Portland, Me.—Technology Association of Maine: No report returned.

Portland, Ore.—Technology Association of Oregon: President, A. G. Lobbe, '07; secretary-treasurer, Charles A. Merriam, '06, 401 Worcester Building, Portland, Ore.; Alumni Council representative, Andrew D. MacLachlan, '96.

Providence—Technology Club of Rhode Island: No report returned.

Rochester—Technology Club of Rochester: President, Adolph

Lomb, '91; first vice-president, J. F. Ancona, '03; second vice-president, A. A. Packard, '98; secretary-treasurer, V. M. Palmer, '03, Eastman Kodak Co., Rochester, N. Y.; executive committee, member, M. H. Eisenhart, '07.

St. Louis—St. Louis Society of the M. I. T.: Chairman, John L. Mauran, '89; secretary-treasurer, Amasa M. Holcombe, '04, 610 Boatmen's Bank Building, St. Louis, Mo.; assistant secretary, Benjamin F. Thomas, Jr., '13, Kirkwood, Mo.; Alumni Council representative, Charles M. Spofford, '93.

Salt Lake City—Intermountain Technology Association: No report returned.

San Francisco—Technology Association of Northern California: No report returned.

Seattle—Technology Club of Puget Sound: President, C. H. Alden, '90; secretary, H. H. Whithed, '11, care Anderson Supply Co., 111 Cherry Street, Seattle, Wash.; vice-president, W. Scott Mathewson, '17.

Spokane—Inland Empire of the M. I. T.: No report returned.

Springfield—Technology Club of Springfield: President, Frank H. Page, '85; secretary-treasurer, Robert C. Albro, '07; executive committee, Augustus Lamb, '97, George C. Gardner, '88, Henry L. Gardner, '14.

Syracuse—M. I. T. Club of Central New York: President, F. J. Chesterman, '05; vice-president, J. R. Vedder, '07; secretary-treasurer, J. S. Barnes, '08, care Merrell-Soule Co., Syracuse, N. Y.; executive committee, H. N. Burhans, '07, J. A. Applequest, '12; Alumni Association representative, T. H. Skinner, '92.

Urbana—Tech Club of the University of Illinois: President, R. C. Tolman, '03; secretary, E. A. Holbrook, '04. "The membership has been so greatly reduced that there are now only seven remaining members."

Washington—Washington Society of the M. I. T.: President, R. B. Sosman, '04; vice-president, William H. Keen, '05; secretary-treasurer, Bertrand L. Johnson, '05, U. S. Geological Survey, Washington, D. C.; Alumni Council representative, Henry Morss, '93; executive committee, president, vice-president, secretary-treasurer, F. W. Swanton, '90.

Worcester—Technology Association of Worcester County: No report returned.

NEWS OF ALUMNI ASSOCIATIONS

M. I. T. CLUB OF CENTRAL NEW YORK.—A meeting was held at the University Club, Thursday, December 6, at six o'clock. Fifteen men were present. We are planning to hold monthly dinners at the University Club on the second Thursday of every month at six o'clock. We are making special efforts to instill a little enthusiasm into our members and we hope to be able to provide some form of entertainment at each one of these dinners, purpose of which will be to maintain the interest so that we can more easily enter into the spirit of co-operation with Institute affairs. We regret to state that this has been largely missing in the past, but we hope to make up for it in the future.—*J. S. Barnes, '08, Secretary, Care Merrell-Soule Co., Syracuse, N. Y.*

THE TECHNOLOGY CLUB OF ROCHESTER.—The Annual Dinner meeting of the club was held at the Rochester Club on Monday evening, October 29. The following officers were elected for the ensuing year: President, Adolph Lomb, '91; first vice-president, J. F. Ancona, '03; second vice-president, A. A. Packard, '98; secretary-treasurer, V. M. Palmer, '03; executive committee, M. H. Eisenhart, '07.

President Lomb gave an interesting report covering the activities of the club in trying to do their bit for the Government. We were asked to help in obtaining men for special work, particularly in connection with the design of special machinery for bomb throwing to be used in trench warfare. Practically all the representative business men of Rochester were interviewed and the names of fourteen men well fitted by experience and natural aptitude were sent to Mr. Litchfield to be submitted to the Government.

Mr. A. A. Packard, representative of the club on the Advisory Council of the Alumni, gave an interesting description of the activities of the Council, outlining many of the problems brought before the Council for action. The present wonderful opportunities for research work and the particular value of this to the Government at this time was especially emphasized and some of the work already accomplished was described.

Alumni present at the meeting were: J. F. Ancona, '03; W. G. Bent, '05; A. S. Crocker, '97; W. P. Cross, '03; C. C. Culver, '96;

O. K. Foote, '80; J. H. Haste, '96; Adolph Lomb, '91; F. W. Lovejoy, '94; W. S. Lucey, '07; C. E. Muelendyke, '10; A. A. Packard, '98; V. M. Palmer, '03; F. B. Saegmuller, '04; H. O. Stewart, '09; A. F. Sulzer, '01; F. C. Taylor, '11; H. H. Tozier, '96; W. G. Wildes, '01; W. V. McMenimen, '03.

The last previous meeting of the club was held on August 23 when Professor Pearson visited us. A dinner was given at the Newport House. At this dinner Professor Pearson told the club of the work which Tech men are doing throughout the country and at the front.

Dr. Frank H. Sexton, '01, Director of Technical Education for the Province of Nova Scotia and Principal of the Nova Scotia Technical College, Halifax, Nova Scotia, delivered a lecture here before the Chamber of Commerce, Thursday evening, November 15, on "The Utilization of Crippled Soldiers and Sailors in Industry," giving in detail an outline of the problems in connection with the rehabilitation of the crippled soldiers from the battle-fields of Europe, together with Canada's experience in the proper solution of these problems. A dinner was given in Dr. Sexton's honor at the University Club at which the following were present: J. H. Haste, '96; E. M. Hawkins, '97; V. E. Lacy, '00; Adolph Lomb, '91; F. W. Lovejoy, '94; V. M. Palmer, '03; A. F. Sulzer, '01; W. G. Wildes, '01.

The club reports the following changes among its members:

G. Bergen Reynolds, '10, formerly of the Kodak Park Works, Eastman Kodak Company, has been transferred to the Toronto, Canada, plant.—Howard Cather, '12, of the Kodak Company, has gone into the service of the Government in charge of construction of aviation cantonments.—W. S. Lucey has taken a position with the Hammermill Paper Company, Erie, Pa., as Chief Engineer.

On Friday evening, November 30, the members of the Club had the pleasure of entertaining at a meeting held at the Rochester club, Mr. John Ritchie, Jr., Chief of Service of the Institute. Mr. Ritchie gave an extremely interesting and instructive talk on "The Helpfulness of the M. I. T. in the War Emergency" and "Alumni Activities," enumerating and describing in detail the many new courses which have been established at the Institute for the development of marine engineers, marine navigators, and other professions valuable to the Government at this time. Mr.

Ritchie also told of the assistance Tech had given in locating and selecting men for special service, of the Tech Ambulance Unit now doing such excellent work in France, of the establishment of the Tech Club in Paris for the benefit of Technology men in the Service abroad, and countless other achievements of which we may be proud.

The meeting was one of the most enjoyable that the club has held in some time and we are all looking forward to the time when we may have Mr. Ritchie with us again.

The club has been fortunate in receiving as a new member this year Mr. H. P. Hart, '05. Mr. Hart came here in September to act as Government Inspector of Artillery and Munitions at the Symington Machine Corporation.—Another new member whom we have been most happy to welcome is Mr. O. E. Conklin, '14, Course 8, Master's Degree, '17. Mr. Conklin has been here since July and is engaged in scientific work at the plant of the Bausch & Lomb Optical Company.—*Virgil M. Palmer, '03, Secretary, Eastman Kodak Co., Rochester, N. Y.*

TECHNOLOGY CLUB OF PHILADELPHIA.—The last meeting was held on November 7, and was addressed by Mr. Joseph Hays of the Lanston Monotype Machine Co. on "Printing, Its Art and Science." The paper was illustrated by lantern slides, and described the development of various types of composing machines and type casting machines, with detailed description of the monotype machine.

The first meeting of the year of the Technology Club was held on Wednesday evening, January 2, 1918. There was an informal dinner at 6.30 P.M. and meeting at 8.15 P.M. Plans for the reunion of the Technology Clubs Associated were discussed and the work of the various committees outlined. The reunion will probably be held on March 29 and 30 with headquarters at Drexel Institute. A tentative program has been arranged and will soon be ready for publication. In view of the present war conditions, a program, which will be of exceptional benefit and service, is being arranged. The following Executive Committee has been appointed:

Dr. Hollis Godfrey, '98, president. Executive Committee: Herbert A. Terrell, '06, chairman; D. K. Bullens, '09, finance and treasurer; Charles F. Willard, '01, publicity; J. Peterson Ryder, '84, registration; Claude A. Anderson, '05, hotels; Hiram L. Walker, '05, transportation; Nathaniel A. White, '06, secretary.

The Club's Honor Roll of Men in Military or Naval Service

R. N. S. Baker, '17, assistant naval constructor U. S. N. Philadelphia Navy Yard.—F. B. Barnes, '15, lieutenant Company D 26th Engineers, Camp Dix, N. J.—G. W. Barnwell, '14, 4th Training Company, Fort Monroe, Va.—F. F. Bell, '10, first lieutenant commanding officer 45th Aero Squadron, Gerstner Field, Lake Charles, La.—H. F. Benson, '01, lieutenant North American Motors Co., Pottsville, Pa.—C. L. Brand, assistant naval constructor U. S. N., Philadelphia Navy Yard.—H. M. Brayton, lieutenant U. S. R. Ordnance, Frankford Arsenal, Philadelphia, Pa.—L. W. Burnham, '14, first lieutenant U. S. Marine Corps, 22d Company, Marine Barracks, Navy Yard, Philadelphia.—A. J. Chantry, '10, naval constructor U. S. N., Philadelphia Navy Yard.—F. G. Coburn, '07, naval constructor U. S. N. Naval Aircraft Factory, Navy Yard, Philadelphia.—A. B. Court, '10, naval constructor U. S. N., Navy Yard, Philadelphia.—E. L. Cochrane, assistant naval constructor U. S. N., Navy Yard, Philadelphia.—E. F. Enright, assistant naval constructor U. S. N., Navy Yard, Philadelphia.—C. S. Gaskill, '99, in France with 19th Regiment U. S. Railroad Engineers.—R. T. Hanson, '11, naval constructor U. S. N., New York Shipbuilding Corporation, Camden, N. J.—J. K. M. Harrison, '10, first lieutenant U. S. N. R. F., Naval Inspector of Ordnance, L. E. Knott Apt. Co., Cambridge, Mass.—Parry Keller, '15, first lieutenant Ordnance Department U. S. R., Frankford Arsenal, Philadelphia, Pa.—William Nelson, assistant naval constructor, U. S. N., Philadelphia Navy Yard.—E. M. Pace, assistant naval constructor, U. S. N., Philadelphia Navy Yard.—W. M. Ruby, '12, first lieutenant, U. S. R., Ordnance Department, Frankford Arsenal, Philadelphia, Pa.—X. R. Smith, '09, lieutenant U. S. R. Ordnance, Remington Arms U. M. C. Co., Ilion, N. Y.—Everett St. John, '12, with Coast Artillery Corps.—P. E. Tillson, '06, lieutenant U. S. N. R. F.—R. D. Weyerbacker, '14, assistant naval constructor, U. S. N., Philadelphia Navy Yard.—Col. John B. Wood, '82, in military service.—*N. A. White, '06, secretary, Wenonah, N. J.*

TECHNOLOGY CLUB OF THE SOUTH.—I am no longer secretary of the Technology Club of the South, having been commissioned captain in the Sanitary Corps, N.A., and assigned to the 37th Division at Camp Sheridan, Alabama. As a matter of fact, our organization is pretty well broken up and we have not had a

meeting for some time, because of the scattering of Technology men who formerly were active in the club.—Allison Owen, '95, is colonel of the Washington Artillery, stationed at Camp Beauregard, La.—*Capt. John O'Neill, '10, San. Corps, N. A., 37th Division, Camp Sheridan, Ala.*

Cannot some member of the Technology Club of the South, not now in service, take up Mr. O'Neill's work?—*Editor.*

TECHNOLOGY CLUB OF NEW BEDFORD.—The annual meeting of the Technology Club of New Bedford was held on Thursday, November 8. There were twelve members present. The following were elected: President, James E. Stetson, '99; member of the Executive Committee, Fred E. Earle, '06. A letter was read by the secretary and treasurer, Mr. Richard D. Chase, '92, resigning, as he is engaged in Government work in New Jersey. His resignation was not accepted, but C. F. Wing, Jr., '98, was elected secretary and treasurer *pro tem* during the absence of the present secretary and treasurer. Charles R. Lawton was appointed the club's Council representative.

The club learned of the death of William B. Dowse, '74, early this year. A committee was appointed to draw suitable resolutions to present to his family. It was voted to hold the annual dinner and a committee was appointed to arrange for it.—*Chas. F. Wing, Jr., Secretary pro tem.*

TECHNOLOGY CLUB OF THE MERRIMACK VALLEY.—The postponed annual meeting of the Technology Club of the Merrimack Valley was held on Thursday evening, November 1, at the Merrimack Valley Country Club. Twenty-seven men were present.

Officers for the coming year were elected as follows: President, Edgar H. Barker, '96, Lowell; vice-president, George F. Russell, '89, Lawrence; secretary, John A. Collins, Jr., '97, Lawrence; treasurer, W. O. Hildreth, '97, Wollaston; member Executive Committee, George H. Perkins, '87, Lowell; representative to Alumni Council, R. A. Hale, '77, Lawrence.

Dinner was served at seven o'clock. Prof. E. F. Miller of the Institute was the guest of the Club and was introduced by President Sickels. Professor Miller described the various special courses that are being given at Tech in connection with preparation for the Army and Navy and particularly the work of the Aviation and Merchant Marine Schools. His talk was greatly enjoyed by all present as it served to put every one in touch with

the very latest developments at the Institute.—*John Arthur Collins, Jr., '97, 67 Thorndyke Street, Lawrence, Mass.*

THE TECHNOLOGY CLUB OF NEW YORK.—The club is fulfilling a useful purpose in this time of war activity in serving as a stopping place and meeting place for Technology men in the National Service who come to New York. It is a safe estimate to say that at least one-third of the men in the club at any time will be in uniform. The club also undertakes to secure rooms for such men as come to New York and are unable to find accommodations at the Technology Club.

A plan is under discussion by the Board of Governors to take over the present Columbia Club property next door. This will add greatly to the accommodations of the Technology Club, particularly in the way of rooms, and it will be possible to have sleeping rooms for about twenty more men. The plans for this addition are being worked out by Mr. E. M. Hagar, chairman of the Finance Committee, and Mr. F. C. Schmitz, treasurer of the club, assisted by the Committee of the Board of Governors, and if the financing necessary can be accomplished, it is thought probable that this addition to the club facilities will be made. The Columbia club is planning to move uptown.

At a smoker held at the club on Thursday evening, December 6, Mr. James P. Munroe, '82, addressed the members on "Washington in War Times," telling of the activities of many Technology men in the National Service, and giving suggestions as to what others might do.

Mr. Howard L. Coburn, '87, is keeping a list of Technology men enrolled in National Service. The list so far numbers 150 names, which are kept posted on the bulletin board at the Clubhouse as a Roll of Honor.

Mr. A. P. Mathesius, '06, Mr. A. L. Davis, '89, and Mr. Daniel W. Edgerly, '98, have recently been elected governors of the club, to take the places of Lester D. Gardner, '98, R. B. Haynes, '13, and Schuyler Schieffelin, '90, who resigned to enter military service.—*Thomas C. Desmond, '09, Secretary, 17 Gramercy Park, New York, New York.*

TECHNOLOGY CLUB OF NORTHERN OHIO.—The Technology Club of Northern Ohio held a meeting December 1 at which thirty-three Tech men were present.

Mr. F. A. Smythe, '89, outlined the splendid work the alumni are

doing in various parts of the country. Dr. Y. A. Sargis addressed us on the war in Turkey and Armenia. Dr. Sargis was six months a prisoner in Turkey and emphasized the tremendous task which our allies face in establishing a permanent democracy.

Mr. L. B. Bacon gave a splendid talk on the effect of the German propaganda in this country, and being a Williams man, well acquainted with the conditions of Technology, pronounced the work of the Institute instructing staff, along with the alumni and students as most patriotic and altogether desirable for the country's welfare.

Mr. D. P. Rogers, '14, is still doing active work in the ambulance corps of the British Red Cross on the Italian front.—Mr. A. M. Eicher, '12, is in France with Stone and Webster.—Mr. R. H. Fox, '12, 1st Lieut. in the Ordnance Department, visited Cleveland last week while inspecting steel at one of our munition makers' plants, and on leaving the city stated he thought Cleveland was possibly a little more wide awake than some of the *eastern men* thought.—Capt. A. A. Gould, '09, is in active service and was last heard from when stationed in Washington.—C. B. Rowley, '12, *Secretary, care H. W. Johns-Manville Co., Superior Ave., N. W., Cleveland, Ohio.*

THE TECHNOLOGY CLUB OF CHILE.—On October 13, nine of the boys got together in Santiago for the annual banquet and election of officers. Eight of us came from Braden: Stevens, Joe White, Bill Conner, Fat Brown, Stan Baxter, Jock Hammond, Sliver Dunning and yours truly. Chinchilla, '11, came up from his hacienda near Melapilla and we sure had a "high grade" time.

Three of us came down from Sewell to Rancagua, about 75 kilometers, on a hand car. We left about 5 p.m. and coasted and pumped for three hours, arriving in Rancagua just in time to catch the night express for the capital. Bowling down the narrow gauge track in the pitch dark we ran into a herd of cows, one nearly sitting in my lap. Don't know which was most surprised, me or the cow. The three days spent in Santiago were mighty pleasant after many months of the monotony of a mining camp. We all had lobster, strawberries and other fancy dishes about three times a day, trying to make up for lost time.

The boys are deeply interested in the States' part in the great war, and we keep posted by the month-old *New York Times*. Some have felt like going back to the States to join the army but General

Crowder has written the company urging us all to remain here and do our part by keeping up the production of copper.

Am sending you under separate cover a photo of the boys of the Tech Chile Club who are here at the Braden Copper Co.—*Joe Livermore, '15, Secretary, Braden Copper Co., Rancagua, Chile.*

GENERAL HAYES ON THE CORPORATION

President Maclaurin announces the election of Gen. Edmund Hayes of Buffalo to be life member of the corporation of the Institute. General Hayes, one of the most prominent men of Buffalo, was a student at Technology in the Class of 1873. The achievement that brought him into public attention was the building of the cantilever bridge across the gorge at Niagara Falls. This undertaking was under the spur of railway necessity and was accomplished in record time. Since that date, General Hayes, who holds his title through State military service, has been engaged in engineering projects in all parts of the world. He has been notable for his public spirit and has been especially devoted to his alma mater. His selection is in accordance with the avowed policy of the Institute to define itself as a national institution of the widest scope.

IN THE PUBLIC EYE

MAURICE SCHARFF, '09, called away from the secretaryship of Technology Bureau in Washington to build Southern depot.

Those who have witnessed the magic-like growth of Camp McClellan and marveled at the dizzying rapidity with which the buildings went up, how the water pipes went in and the big drive went on, have, very few of them, thought of the preparatory work which was necessary before a post was driven into ground or one plank nailed above another.

The engineering feat of Camp McClellan has been a distinct outstanding feature to those who have watched the work from the beginning to the present moment and who realize that without the preliminary labor of the engineer, Camp McClellan would look very much like a Chinese puzzle and not the orderly and well coördinated city they now see in driving over the roads the engineers made possible.

And not many are aware of the fact that the man in all the United States who was picked for this big job is the tall, big-boned young expert, Maurice R. Scharff, who has little to say, but lets his work speak for him. Just how tall Scharff is, no man knows. They would have to take one of his steel tape lines to be sure to have length enough. Most likely it is somewhere about six feet four or five inches, and had he been living in Germany the Kaiser would have put him in the front rank of his giant bodyguard. But Scharff does not hail from Germany, but was born way down in Mississippi Delta, in the aristocratic little city of Natchez, which was founded long before New Orleans, and that was exactly 198 years ago. Not that age matters with Engineer Scharff, for he is a mere youth as to years, but a grizzly headed veteran in point of experience and service.

When the big job at Camp McClellan was decided upon, the engineering end of the contract was awarded to the distinguished Pittsburgh engineer, Morris Knowles. He, in turn, placed the responsibility on the shoulders of his young principal assistant, Maurice R. Scharff, who, from first to last, has handled the big cantonment work as an independent proposition and incidentally, has added laurels to his reputation and praise from his commanding officer. For it is an open secret that Major Dulin, constructing

quartermaster, has implicit faith in Scharff, that young and swift-moving engineer assigned to Camp McClellan.

Mr. Scharff, after the usual preliminary education in his own home town, graduated at Phillips-Exeter and took his engineer's degree at the Massachusetts Institute of Technology in 1909, and wears one of those blue-enameled shields which indicate that the man behind is a member of that association of builders, the Society of American Engineers.

Whatever credit may come to Camp McClellan as the star cantonment of the United States, Major Dulin shares it in liberal quantity with Scharff and others of his busy and snappy band of officers and superintendents and foremen, and to the zeal and patriotism of the workmen under them.

But it was Scharff who had to survey the whole 16,000 acres of mountains and valleys and to cover this difficult and unusual terrain with the lines and make the maps and drawings and tracings from which ultimately sprang the largest and best-constructed cantonment in the United States today.—*Anniston, Alabama, Evening Star.*

HORACE S. BAKER, '03, who will long be remembered as the man who set the N. E. I. A. record for the half mile at 1.59, and incidentally on the same day the M. I. T. record for the mile run at 4.30 3-5, has been setting records for camp construction at Camp Bowie, and has won his lieutenant-colonelcy in recognition of beating the schedule for building that camp by a week.

On leaving the Institute, Baker joined the engineering department of the Chicago & Northwestern Railroad, and for a number of years has been assistant city engineer of Chicago. As a member of the National Guard he spent three months on the border at the time of the Mexican trouble. The formation of the National Army found him a captain of engineers, and he was stationed as constructing quartermaster at Fort Worth, Texas, having charge of the construction of cantonments at Camp Bowie. Those who know Baker are not surprised that he has handled this job, using 6,000,000 feet of lumber and 5000 men, in a way that clipped a week from the schedule, won the respect of workmen and civilians, and the approval of his superiors shown by his promotion to be lieutenant-colonel of the 111th U. S. Engineers.

CHARLES T. MAIN, '76, of Boston, a consulting engineer who has served in several public offices for the purpose of advancing

the idea of good government, has been elected president of The American Society of Mechanical Engineers, which includes in its membership 8500 mechanical engineers. Mr. Main was born in Marblehead, Mass., in 1856 and was educated at the Massachusetts Institute of Technology, from which he was graduated in 1876. Three years later, after continuous service in the Institute as assistant in the department of mechanical engineering, he became a draftsman at the Manchester Mills, Manchester, N. H., leaving this concern in 1881 to enter the employment of the Lower Pacific Mills, Lawrence, Mass., where for eleven years he acted in the respective capacities of engineer, assistant superintendent and superintendent. Since 1892 he has practised as a consulting engineer, with offices in Boston, until 1907 being associated with F. W. Dean in the firm of Dean & Main. Mr. Main has designed and supervised the construction of numerous industrial, steam-power and water-power plants, among his largest undertakings being the Wood Worsted and Ayer Mills in Lawrence, Mass., and four hydroelectric developments for the Montana Power Company, aggregating about 280,000 horsepower. Mr. Main became a member of The American Society of Mechanical Engineers in 1885 and has served on its Board of Managers for the past three years. He is also a member of the American Society of Civil Engineers and a number of other engineering and technical societies.

BENJAMIN STEARNS HINCKLEY, '99. When "Ben" Hinckley was chosen to go on to Washington to act as assistant to Fuel Administrator Garfield, the choosers chose wisely and well. No man in the country could have been selected to fill the position, better informed and equipped, by reason of past experience, than Mr. Hinckley.

He is known in railroad circles as "Ben," and spent his boyhood days in Woburn. Graduating from Technology, he had his first railroad experience on the Northern Pacific for a few years and then came east to New Haven, where for some years he filled the position with the New Haven Road as "engineer of tests" on coal.

When the New Haven took over the B. & M., he came to Boston and filled the same position for both systems in a dual capacity. Then, when the New Haven gave up the B. & M., "Ben" was made purchasing agent of the latter and has been here in Boston ever since, making his home in Newton with his wife and two daughters.

By reason of his knowledge of transportation, as well as coal, he

is surely *splendidly equipped to look after New England's interests, so far as the bituminous end of the situation goes.* Quiet and unassuming in his general manner and bearing, he is a "plugger" and a man with lots of stability. Always loyal to his corporations, New England may rest assured that he will be also such to her.

CHARLES J. MCINTOSH, '03, as president of the Federal Bridge and Constructural Co. of Waukesha, Wis., closed the contract early this summer for the fabrication of the complete steel frames of eighteen composite cargo carrying steamers contracted for by the United States Shipping Board Emergency Fleet Corporation with the Mobile Shipbuilding Co. of Mobile, Ala., this being, as far as he knows, the first and only contract closed by any bridge works in the country for the fabrication of the entire steel works of a ship. Later he also contracted with the Emergency Fleet Corporation through the Submarine Boat Corporation for several thousand tons of steel works for ships to be constructed for the Government by the company. McIntosh was also commissioned in June as captain in the Engineer Officers Reserve Corps, and he is now on active duty at Camp Lee, Petersburg, Va.

PUBLICATIONS OF THE INSTITUTE STAFF

FRANK AYDELOTTE. *The Oxford Stamp*. New York. Pp. 219. December, 1917.

DANA P. BARTLETT. *Bulletin of the Massachusetts Institute of Technology*, Technology Press, Cambridge, Mass. Vol. 1. Pp. 530. Illustrated. Size 8vo. December, 1916.

DANA P. BARTLETT. *Bulletin of the Massachusetts Institute of Technology*, Technology Press, Cambridge, Mass. Report of President and Treasurer. Vol. 52. No. 2. Pp. 156. Size 8vo. January, 1917.

DANA P. BARTLETT. *Bulletin of the Massachusetts Institute of Technology*, Technology Press, Cambridge, Mass. Summer Courses. Vol. 52. No. 3. Pp. 23. Size, 8vo. March, 1917.

DANA P. BARTLETT. *Bulletin of the Massachusetts Institute of Technology*, Technology Press, Cambridge, Mass. Surveying Camp. Vol. 52. No. 3 extra. Pp. 16. Size, 8vo. May, 1917.

ROBERT PAYNE BIGELOW. *Spermatozoa. Reference Handbook of the Medical Sciences*. Third Edition. Vol. 7. Pp. 416-432. 1917.

H. C. BRADLEY. *Variation. Reference Handbook of the Medical Sciences*. Third Edition. Vol. 8. Pp. 287. Diagrams. Size, 12mo. October, 1917.

HENRY FAY. *An Advanced Course in Quantitative Analysis*. John Wiley and Sons, New York. 1917.

A. H. GILL. *Gas and Fuel Analysis for Engineers*. John Wiley and Sons, Inc., New York. Pp. 145. Size, 8vo. Illustrated. 1917.

A. H. GILL. *Gas Analysis for Chemists*. Van Nostrand, New York. Pp. 50. Illustrated. Size, lge. 8vo. 1917.

A. H. GILL. *Gasoline. Aviation*. Vol. 2. P. 402. 1917.

A. H. GILL. *Notes upon Oil Testing. Journal of Industrial and Engineering Chemistry*. Vol. 9. P. 136. 1917.

A. H. GILL. *Color Tests for Oils—Palm Oil. Journal of Industrial and Engineering Chemistry*. Vol. 9. P. 136. 1917.

A. H. GILL. *Chapter on Fixed Oils, Fats and Scott's Standard Methods of Analysis*. P. 566-605. *Chapter on Gas Analysis*. P. 687-738.

CARLE R. HAYWARD. *Heat Treatment of Wrought Iron Chain Cable. Trans American Society of Mechanical Engineers*. P. 1203. 1916.

MURRAY P. HOROWITZ. A Synoptic Report on a Comparative Sanitary Survey of Two Massachusetts Cities. Boston, Mass. Vol. 7. P. 698. No. of pages 13. August, 1917.

MURRAY P. HOROWITZ. Training City Managers and Relations to Public Health and Sanitation. *Engineering News-Record*. Vol. 79. P. 220. August 2, 1917.

R. G. HUDSON. Assisted by J. LIPKA, H. B. LUTHER and D. PEABODY, JR. *The Engineer's Manual*. John Wiley and Sons, New York. Pp. 310, 227. Illustrated figures. Size, 5 lrg. $7\frac{3}{4}$. 1917.

R. G. HUDSON and J. LIPKA. A Manual of Mathematics. John Wiley and Sons, New York. Pp. 130. 95 Illustrated figures. Size 5 lrg. $7\frac{3}{4}$. 1917.

R. G. HUDSON and J. LIPKA. A Table of Integrals. John Wiley and Sons, New York. Pp. 24. Size, 5 lrg. $7\frac{3}{4}$. 1917.

LEWIS JEROME JOHNSON. Municipal Taxation as an Aid to Prosperity. *American City*. Vol. 16. No. 4. P. 384. 1917.

F. A. LAWS. Electrical Measurements. McCraw-Hill Book Co. Pp. 719. Illustrated. 8 x $5\frac{1}{2}$.

ERVIN KENISON. Kenison and Bradley. Descriptive Geometry. MacMillan Co., New York. Vol. 7. Pp. 287. Diagrams. Size 12mo. October, 1917.

F. J. MOORE and C. S. VENABLE. Cyanionic Acid as an Oxidation Product of Uric Acid. Its Probable Identity with Tetracarbonimide. *Journal of the American Chemical Society*. Vol. 39. P. 1750. Illustrated. August, 1917.

ARTHUR A. NOYES, F. W. HALL and J. A. BEATTIE. The Solubility of Bismuth Oxychloride in Hydrochloric Acid and Its Relation to Complex Formation. *Journal of American Chemical Society*. Vol. 39. P. 2526. December, 1917.

ARTHUR A. NOYES and JAMES H. ELLIS. The Free Energy of Hydrochloric Acid in Aqueous Solution 11. *Journal of American Chemical Society*. Vol. 39. P. 2532. Illustrated. December 1, 1917.

HENRY G. PEARSON. Life of William Harve McElwain. Privately printed. Merrymount Press, Boston. March, 1917.

W. T. SEDGWICK and H. W. TYLER. A Short History of Science. Pp. 467. Illustrated. New York. 1917.

ZSIGMONDY SPEAR. The Chemistry of Colloids. John Wiley and Sons, New York. P. 288. 39 Illustrations. 1917.

GEORGE F. SWAIN. Report on Valuation of Certain Canadian

Railways. Ottawa, Ont. Size 8vo. P. 74. Size of vol. $6\frac{1}{2} \times 10$. April, 1917.

M. DE KAY, THOMPSON and T. C. ATCHISON. The Production and Properties of Magnetite Electroids. *Trans American Electro-chemistry Society*. Vol. 31. Pp. 213-219. May, 1917.

H. W. TYLER and W. T. SEDGWICK. A Short History of Science. Pp. 467. Illustrated. New York. 1917.

F. S. WOODS, WOODS and BAILEY. Analytic Geometry and Calculus. Boston. Pp. 516. Illustrated. November, 1917.

BOOK REVIEWS

THE VILLAGE PEST, a novel by Montgomery Rollins. Lothrop, Lee and Shepard Co.

AT PLATTSBURG, novel by Allen French. Charles Scribner's Sons.

THE HIDING PLACES, novel by Allen French. Charles Scribner's Sons.

THE OXFORD STAMP, essays by Frank Aydelotte. Oxford University Press, N. Y.

It is not often that the Editor—who is no scientist—gets a batch of books by Technology men that he can understand and introduce to his readers personally, without having to resort to experts. But this month he has three, which have been accumulating this fall and winter, to show that Technology men can produce fiction as well as the next man.

If you want a story which will take you back to the days when you were a boy—especially if you were a bad boy—a book to take up after a hard day's work when you want to relax and laugh, read "The Village Pest," by Montgomery Rollins, '89. On his title page Mr. Rollins remarks that he is the "author of other works which being of a serious nature are quite foreign to the subject in hand." But any one who, like the Editor, would be only scared by the author's other works, financial and statistical, need have no fear of "The Village Pest." He is just plain boy, vouched for as being authentic and historical by the author, who, one suspects, knew him better than any one else. David Hamilton is brother-in-arms of Tom Sawyer and Huck Finn, of Plup Shute, and even, one regrets to say, of Peck's Bad Boy. He lives through years full of variety and change, in Florida, on a New England farm, and in Washington, where his father is Senator, and wherever he goes he leaves behind him a trail of mischief, devastation and punishment, though punishment tempered by laughter. The dignity of the United States Senate is not safe from him, nor the British Embassy nor even Mt. Vernon. Usually he comes out on top, occasionally he is caught up with and then his punishments are often as ingenious and amusing as his crimes.

For sheer novelty of invention—if they are invented—David's pranks are hard to surpass, and the whole book has about it a curious and delightful air of originality tempered by authenticity which reminds one of the best attempts in the past to tell the story of a bad boy. In this respect Mr. Rollins has touched the levels

of Aldrich and Judge Shute, rather than that, more romantic and less convincing, on which Booth Tarkington moves with Penrod.

Childless alumni may enjoy Mr. Rollins's story to the full; those with young sons may enjoy it, too, but for their own peace of mind they are urged to keep the book locked up. Imitation is the sincerest flattery, and David is the sort of small boy that other small boys would like to flatter.

A more serious piece of fiction is the novel called "The Hiding Places," by Allen French, '92, a graduate of Course IX, who has since followed the profession of writing. In this story of a New England farm and of Boston business life the reader feels the touch of a writer who can not only invent a compelling situation and aptly characterize the actors in it, but can do it in English of real distinction. The style has savor of the sort one expects more from the novelists of England than from the run of American story tellers.

The plot combines in a fresh way several widely diverse situations; there is a New England farm with a queer will and a rascally lawyer and a century-old rivalry of search for buried treasure; and mingled with this is a persuasive account of the shadier sort of Boston business life where the respectable crook spreads the net of the bucket shop with promise of large, certain returns for the rustic and the unwary. And there are two heroines subtly and convincingly characterized.

Taken simply as a good yarn, "The Hiding Places" will amply repay reading, but to the born New Englander it has another interest. The fiction writer who deals with New England sees it too often as drab, austere, monotonous, a depressing environment in which bloodless people live commonplace lives. Too often, therefore, New England is presented either a study in the more depressing sort of realism or as a contrast to the more highly colored, vivid and attractive life outside its borders. But Mr. French has remembered something that Hawthorne also knew, but which was almost forgotten till Percy Mackaye recalled it the other day in his "Yankee Fantasies," namely, that the dull, rigid, uninteresting exterior of our semi-Puritan remains is only the shell over genuine, if often perverse, color and flame and passion, that under our ice is fire, often all the hotter for being frozen over, and that the New England character when it does burst through its environment is like a flower, brighter and more fragrant because it is exotic.

Something of this quality Mr. French has caught in this study of a New England farm on which is let loose all the passions of greed and hate, love and death, through the baleful legacy of a piratical ancestor. And it is this quality which raises the novel out of the ruck of those one reads and forgets.

But Mr. French can also be timely and none the less interesting. A public keenly interested in the ways in which our young men are being trained for military service will find "At Plattsburg" perhaps even more attractive than "The Hiding Places," even though it does not pretend to the artistry of the other story. The book is a record, in letters which tell a story, of what Mr. French learned as a rookie in the Plattsburg Training Camp of 1916. In a character of which we catch occasional glimpses, Prof. Erasmus Corder of Harvard University, one imagines he catches a glimpse of Mr. French himself acting as a maturer chorus on the impressions of the young man whose letters make up most of the book. There is a thread of love story, which does no harm, though it adds nothing particularly, but the real value of "At Plattsburg" lies in the observation, extremely close and accurate—so I have been told by men who have been through the same thing themselves—of all the detail of the camp life, the day's work, the minutiae of the military organization, the clash and contrast of character, and the development that comes to young and careless men through constant military discipline directed towards the effective carrying out of a great ideal.

It is not exactly a novel, hardly a boy's story, certainly not a manual of "what to do at Plattsburg," but it combines happily the characteristics of all three. And Mr. French's felicity of phrase and his more than competent selection and management of detail are as noticeable here as in "The Hiding Places." Technology has produced, naturally enough, few artists, particularly in letters. Gelett Burgess is the only one every one knows about. But Allen French should take his place beside that sulphitic genius in the appreciation of Institute men.

One other book I want to mention, not a piece of fiction and not, strictly speaking, by a Technology man. It is a little book of essays entitled "The Oxford Stamp," by Frank Aydelotte, former Rhodes Scholar and present Professor of English at the Institute. It is worth the while of any alumnus seriously interested in the educational future of the Institute, because at such a time as this,

when the teaching systems of college and technical school alike are being severely tested, this plea for certain ideals of education which seem novel to us, however successful in England, may help us to decide what we want to do in our places of higher education. The whole book, throughout its ten chapters on apparently unrelated subjects, is a plea for an educational system which shall give a complete knowledge of the subject instead of arbitrary and limited "courses," which shall test a student's synthesis of the whole rather than his grasp of the parts. The English student, says Professor Aydelotte, knows his subject; the American student passes his courses. Together with this goes a study of the teaching of English in America, a condemnation of the separation of literature from rhetoric, and a demand that a student, even an engineering student, must learn to write, not from rules, but through copious reading and the intellectual mastery of it in discussion. As Professor Aydelotte was chosen to write the chapter—here reprinted—on the teaching of English for the Carnegie Foundation's report on Engineering Education, these essays have an unusual authority and value. And besides this, the spirit of the whole book is one of earnest desire to draw America closer in comprehension and sympathy to England, from whom she has so much to learn, but of whom she is so ignorant.

In short, the Editor considers that these four books give the Institute a right to be proud of something besides producing engineers. He enjoyed reading them; he would like some more to read. As the barber inquiringly remarks—Next?

R. E. R.

The electrical research division of the Massachusetts Institute of Technology has had under consideration and investigation for several years the various problems of transportation. The latest report, which appears in book form (M. I. T., Research Division Bulletin, No. 14), concerns itself with street railway affairs, and takes up the basic questions of the nickel fare, length of haul, zone system, and others in a comprehensive discussion.

It is predicted that the flat rate will soon disappear, and a fare based on length of haul substituted, an evidence that the single fare from one point on the line to any other can no longer stand in the face of modern methods of business and modern extensions of transportation systems.

Prof. Dugald C. Jackson, with H. F. Thomson, David J. McGrath, O. Robert Schurig, Thomas N. Buell, and Edmond W. Bowler as assistants, have been employed on the investigations.

Density of traffic, it appears, is the most important factor towards success of

street railway operation, and the higher this figure, the lower are the proportionate investment charges and the operating costs per passenger. Density of traffic is a factor that does not always follow expected lines; for example, it is large in medium-sized cities, but in cities like Boston, Philadelphia, and New York it is likely to be made less through the existence of long routes into sparsely settled suburbs.

Another important factor is the rate of fare, for it is true that the increasing of unit fares tends to discourage and decrease traffic, while lowering the rate of fare, always increases the number of passengers. A flat rate of fare over whole cities or over extended districts is customary today almost everywhere in this country, but these investigations show that it is in error in principle. The nickel is a very convenient fare, but if it is to be used, limiting the distance which one may ride for one fare is suggested. The three-cent fare within city districts has theoretically its advantages, but with its use there are rather important additional costs in collecting and in auditing, and difficulties in limiting the ride to relatively short distances.

Some of the by-products of the investigations show curious relationships. The ability to take long rides for a single fare seems to increase the distance which the average passenger rides. The uniform fare throughout a great street railway system puts a comparatively higher rate on short rides for the benefit of those who take long rides. While it may seem that the rush-hour traffic is of great benefit to the railways, it is to be remembered that the returning cars are correspondingly empty, and thus the balance is maintained. Then it has been learned that the issue of transfers actually lengthens the average rides of the passengers.

With all these considerations, it becomes evident that if the present upward tendencies in costs continue, street railways must stop development, or else must find means for increasing their incomes.

—*The New York Commercial.*

THE COST OF FOOD. A Study in Dietaries. By Ellen H. Richards, a very prominent instructor at one time in sanitary chemistry.

This is the third edition revised under the direction of Professor Norton of chemistry of sanitation, Massachusetts Institute of Technology. A very interesting and instructive book. (Published by John Wiley & Sons, New York.)

SEAPLANES ON THE WATER is the title of a monograph published this summer by Godfrey L. Cabot, '81, Lieutenant, U. S. N. R. F. No publisher is given, but presumably the monograph can be procured from Lieutenant Cabot, 940 Old South Building, Boston, Mass.

NEWS FROM THE CLASSES

1869.

The *St. Louis, Mo., Mirror* printed the following:

Single taxers of Massachusetts are mourning the loss of a veteran leader; one who for the last quarter of a century has taught the pure doctrine of Henry George in words of persuasive eloquence, who brought all the force of his remarkable personality to bear upon the science of taxation, and who captured the sympathies of the ruling authorities to an extent that, unfortunately, the more strident among the propagandists have failed to do. The Old Bay State has indeed been singularly favored in the possession of such an exponent of the natural and righteous basis of revenue-raising. In his own self-chosen rôle of teacher of the Economists, the taxation experts, and the leaders of the business life of the community, Charles Bowdoin Fillebrown of Boston occupied a unique position.

The details of Mr. Fillebrown's life may be shortly told. Born at Winthrop, Maine, in 1842, he served during the Civil War from 1862 to 1866, and immediately thereafter, with a preparatory training of eighteen months at the Massachusetts Institute of Technology, he entered upon the commercial career which terminated a few years ago on his return from the dry goods business. Since that time his energies were entirely devoted to the cause he had so much at heart. His friends were numerous; and, strange to relate of a man who set himself to the defense of public rights as against private privileges, — of his enemies there were none.

1872.

C. FRANK ALLEN, *Secretary*,
88 Montview Street, West Roxbury, Mass.

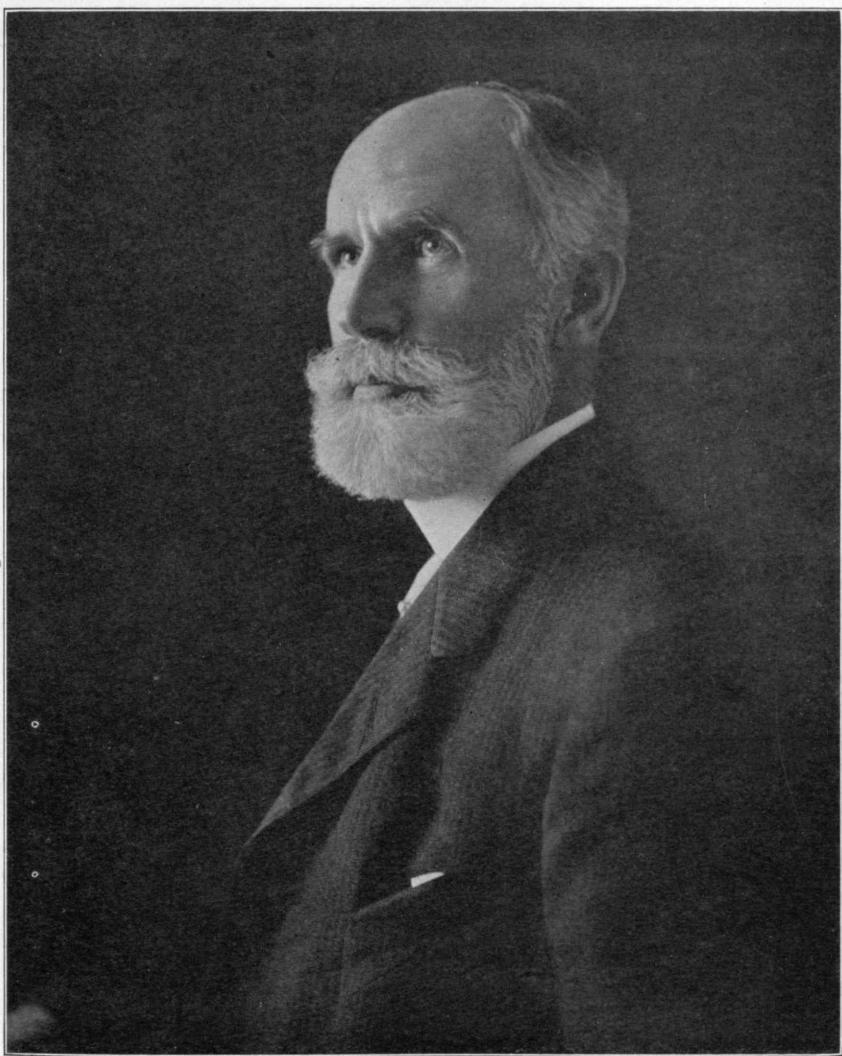
In the absence of the secretary, the REVIEW reprints the following item from *The Tech*:

Prof. C. Frank Allen, retired, of the Institute, is on a tour of some three thousand miles to visit the local associations of Technology in the different northern cities of the country. His itinerary includes Schenectady, Syracuse, Detroit, Chicago, Minneapolis, Kansas City and St. Louis. On his return he will undertake a similar trip through the Southern States and will visit altogether some seventeen of the M. I. T. alumni organizations. Trips of this kind are a regular service undertaken by the parent association in Boston to keep the former students in touch with the Technology of today. Professor Allen will speak of the numerous war activities of the Institute, as well as of the more peaceful matters of the ordinary curriculum, the Walker Memorial and the government of the dormitories.

1873.

SAMUEL EVERETT TINKHAM, *Secretary*,
The Warren, Roxbury, Mass.

President Maclaurin has announced the election of Gen. Edmund Hayes of Buffalo to be life member of the corporation of the Institute. General Hayes is one of the most prominent men of Buffalo.



THEODORE SCHWARZ, '76

Photo by Gato



The Great Hall Looking South



The Great Hall Looking North
THE WALKER MEMORIAL

The achievement that brought him into public attention was the building of the cantilever bridge across the gorge at Niagara Falls. This undertaking was under the spur of railway necessity and was accomplished in record time. Since that date General Hayes, who holds his title through State military service, has been engaged in engineering projects in all parts of the world.

He has been notable for his public spirit and has been especially devoted to his alma mater. His selection is in accordance with the avowed policy of the Institute to define itself as a national institution of the widest scope.

H. L. Ripley is lieutenant-colonel of cavalry in charge of the Signal Corps.

1874

CHARLES FRENCH READ, *Secretary*, Old State House, Boston, Mass.

The only item of news of the class which has come to the REVIEW is that of William T. Blunt, who is assistant engineer in the Engineer Corps.

1876.

JOHN RIPLEY FREEMAN, *Secretary*,
Grosvenor Building, Providence, R. I.

THEODORE SCHWARZ.

One of the noblest characters among our Tech Alumni passed on to his reward Sunday evening, September 30. There are few characters strong enough to face the inevitable as cheerfully and courageously as he had done for nearly ten years past, since stricken with a slowly increasing shaking palsy and nervous paralysis, derived from too long service in the high altitude of Leadville, Col.

Ten years ago I met him in Denver, while, although stricken and suffering, he was still able cheerfully to attend to business, and asked him why he did not come East and seek the best medical advice in America. His reply was that he had already done so and had received the verdict, which was that there was no cure, that medicine could simply allay the tremor temporarily, that muscular control would weaken, and that the end might be one year or ten years off, and that he must simply smile and bear it, and through all the later years of pain, suffering and physical helplessness, he has been steadfast to this resolution.

His will power was unconquered and his intellect clear and strong to the last. Last summer while our classmate Townsend from Chemulpo was back here revisiting kin and friends, four of us motored out to Sharon where he was spending the summer and cheered him with memories of student days. The old smile was still in evidence and interest keen as ever in his classmates' success, as in voice scarcely audible he tried to join in the questioning.

It all brought back memories of the latter days of our noble and lamented Holman.

Strikingly tall, handsome and athletic in his student days and in his days of roughing it as a miner and a mining engineer in the Rocky Mountains, it was hard for his classmates to understand how such helplessness should be the end of one endowed with such a frame. Perhaps the cause was that this physical strength allowed him to defy the warnings that the prolonged hard work in the rarefied air, which was crowning with success the extensive improvements in the well-known Iron-Silver Mine of Leadville, of which he was Engineer and Manager, was affecting his nervous system.

When the first shock came, one of his old-time friends in Denver remarked to me, with a mixture of pathos and levity: "Poor Schwarz, his case proves that a man ought to have some bad habits, which, like ballast, can be thrown overboard, one after the other, when health becomes impaired. Schwarz has lived such a persistently correct and abstemious life that even the advantage that might come from giving up smoking is denied him."

Theodore was born in Boston, graduated from English High and lived in Boston continuously until graduating from the Institute in 1876, except that summers were passed at the country home on the banks of the Connecticut, in Greenfield.

His father, Louis B. Schwarz, was a pastor of the fine, old-fashioned German type, whose library on Charles Street, with its profusion and confusion of books, would have made a worthy study for an artist, and whose strain of ideality had found expression years ago, in the purchase of much of the wreckage from the old John Hancock house on Beacon Hill, which he had reassembled on his farm by the shores of the river at Greenfield, and as I sat with him there one evening, he soliloquized on the associations of the old Colonial fireplace and the interior wood finish of the living room and of the illustrious men of Revolutionary days to whom these house timbers and furnishings had given shelter and comfort.

His great-grandfather on his mother's side, Moses Grant, was a member of the famous "Boston Tea Party," and his grandfather, "Deacon Grant," was a well-known, vigorous character in the Boston of seventy-five years ago and a moving spirit in the temperance awakening of those days.

Upon graduation, Theodore soon struck out for the Rocky Mountains as the proper field for his chosen profession of mining engineering, after a few months' assistance to Professor Ordway in a study of certain coal and iron lands in West Virginia and studies of certain ore reduction processes at a small New England works.

In the Colorado of forty years ago, conditions were more crude than those we find there today. The ruggedness of mountains and manhood appealed to him and he absorbed the Western spirit through and through.

After preliminary work as assistant engineer on the famous Burleigh Tunnel, where the modern machine rock drill was first developed, he concluded it would be good training to get more of the viewpoint of the practical miner, and so for some months he worked with hammer, pick and drill, at the Georgetown Camp, and has told me often that he regarded this experience as well worth the effort and good training for the management of men that later came to him.

Theodore's quality of leadership was shown in our student days, when he was a captain in the Cadet Corps, and his company won the colors in the competitive drill.

Substantially all of his working life was spent in the Colorado Mountains, sometimes as the practical manager of one or another important mine and sometimes as a consulting mining engineer, with office in Denver. Everywhere he was held in highest regard for his rugged force of character, his steadfastness and his depth of religious sentiment.

When his physicians told him that his remaining days should be spent at near-sea level, it was with many regrets that he turned his back on Denver, and naturally he came back to Boston, his birthplace and boyhood home. His radius of action became more and more circumscribed and for the past three or four years he has been confined to his chair and his couch.

Classmates and friends were glad to call, because of the evident pleasure that it gave him, and to the end he took a keen interest in the events of the day and in the prosperity of Technology.

In his period of mine management, in 1882, he had charge of the Santa Rita Copper Company in New Mexico, now the Chino. In 1884 he took charge of the Yankee Girl Mine at Red Mountain in southwestern Colorado, and in his five years of management made it a great success.

In recounting the early days of the Silverton District he once gave a few of us a thrilling account of a venturous trip across the mountains in a raging snowstorm, in which mails, wagon and finally the mules were all abandoned, while he and his companions barely got through with their lives, the last crossing of the pass until the next spring.

Between 1888 and 1900 his management brought prosperity to the Guston mine, for its English owners, previously a failure. In 1890 he had an office in Denver, which he made a center for his activities as consulting engineer to various mines. In 1905 he took charge of the Iron-Silver Mine at Leadville, at which he worked unremittingly on increased development until his health failed in 1908, as already stated.

He leaves a widow, Mrs. Florence Boyd Schwarz, Brookline, Mass.; a son, Louis B., sales engineer of mining machinery, Montreal and Toronto, Canada; two daughters, Mrs. Gertrude McClurg of Chicago, and Miss Dorothy Schwarz of Brookline, Mass.

1877.

RICHARD AUGUSTUS HALE, *Secretary*, Essex Co., Lawrence, Mass.

Henry Hibbard's son, Lyman, has been driving an ambulance on the French front and has written very interesting letters relating his experience and the thrilling escapes in motoring through a region while under shell fire. He has had good fortune in driving his car and is considered one of the most reliable drivers in his section. He was located near Verdun during some of the most active fighting and has had a long run at night without lights, carrying the wounded from the front to a hospital in the rear. He has been transferred more recently to a branch of the artillery.

Clarke, '77, of Hill Clarke & Company is very busy furnishing his machines of precision, which he has developed for Government use.

1881.

FRANK ELDEN CAME, *Secretary*,
Metcalfe Apts., Westmount, Montreal, P. Q.

FRANK H. BRIGGS, *Assistant Secretary*,
146 Summer Street, Boston, Mass.

Harold Stearns visited the auto show in New York in January. He has a son with the Equitable Trust Co. of New York.

Frank H. Briggs has been appointed chairman of the War Trade Committee of the National Association of Hide and Skin Importers.

1882.

WALTER B. SNOW, *Secretary*, 136 Federal Street, Boston, Mass.

The only news that the secretary has received regarding any member in the service is to the effect that Jno. P. Wood is located at Camp Hancock, Augusta, Ga., commanding 101st Cavalry, later 103d Engineers. Wood's letter, which contained much of interest, was censored by the author himself in this closing sentence: "With kind regards to all the members of the class whom you may meet; and a very strict injunction for the observance of the conditions mentioned in the beginning of this letter."—George W. Mansfield reports his present address as 914 French Street, Erie, Pa.—Grenville Temple Snelling is considering service in construction work "overseas," but at the time of writing had made no definite plans.

1883.

HARVEY S. CHASE, *Secretary*, 84 State Street, Boston, Mass.

Dave Wesson says:

I notice you want some dope regarding the writer and the members of his family in connection with war activities, etc. I am still living at 111 South Mountain Avenue, Montclair, N. J., with my office at 120 Broadway, New York. My

oldest child, *nee* Marjory Osborn Wesson, became Mrs. William Winterbottom Francis, October last. My oldest son, David M. Wesson, went to France last June, drove an ambulance several months, and is now connected with the Aviation Department of the American Expeditionary Forces, serving as inspector of materials for hangars and barracks. My second son, David B. Wesson, has been accepted for aviation in the Naval Reserve, and while awaiting the call to service, or rather to go to one of the aviation schools, is engaged in the Standard Aeroplane Factory, Plainfield, N. J. The writer is very much interested in the edible fat supply, which is going to be an important factor in winning the war, and he is a member of the Fat and Oil Sub-Committee of the National Research Council. The committee consists of two members, Mr. Martin Ittner of the Colgate Company, who is president, and I am vice-president. I have spent part of the last two weeks in Washington and while there met our friends, Mr. James P. Monroe and Mr. Everett Mors. I ran into a number of other Tech men but of more recent periods. I have not been near the Tech since September, when I was over there at the meeting of the American Chemical Society. From what I have seen in Washington and from what I hear as I go about, there is no question but the M. I. T. is going to take a high place in winning the war.

Henry W. Kingsbury of Scranton, Pa., is doing his "bit" as captain in the Home Defense Reserves.

In reply to a questionnaire, Dwight F. Boyden of Boston writes he has "two kids, boy of 12, girl of 10, both good sports and good losers, boy at Fays, Southboro, Mass.; girl in a Boston school." About war activities he says:

"Paying my taxes and buying Liberty Loans, too old and decrepit for service, they tell me. Haven't seen any of the class since Hector was a 'pup.'" Concerning the new Tech, he says: "It looks so span and new I have been afraid to go into it," and ends, "Hope the class will get together sometime when my 'tummy' allows me to be myself, for I should like to stand in and help start something."

1884.

HARRY W. TYLER, *Secretary, M. I. T., Cambridge, Mass.*

Major-General John F. Weston, U. S. A., Retired, died August 4, last, in the Ossining Hospital at the age of 71. General Weston was born in Louisville, Ky., November 13, 1845. When only sixteen years of age he was commissioned first lieutenant of the Fourth Kentucky Cavalry, November, 1861. He became captain before he was eighteen, and major at nineteen; was honorably mustered out August, 1865. He was engaged in actions at Franklin Tenn., Triune, Shelbyville, Decker's Station, Broometon Valley, battles of Resaca and Chickamauga and in operations from Atlanta, Ga., to Gadsden, Ala., in pursuit of the rebel cavalry; also in action at Hopkinsville, Ky., and in the capture of Montgomery and of the rebel steamboats on the Coosa and Tallapoosa Rivers. He was awarded a medal of honor for gallantry at Wetumpka, Ala. In command of a small detachment ordered to destroy steamboats loaded with supplies for the enemy, he was stopped en route by an unfordable river. With five of his men he swam the river, captured two leaky canoes, ferried his men across, encountered and defeated a force of the enemy, and on reaching Wetumpka

found the boats anchored amidstream. He lured the captain ashore and with the boat thus secured reached the steamers and demanded and received their surrender. In August, 1867, he was appointed second lieutenant of the Seventh Cavalry; in November, 1868, first lieutenant, and in November, 1875, captain and commissary. He completed a course at the Artillery School at Fortress Monroe, and became major in August, 1892, lieutenant-colonel in 1897, colonel and assistant commissary general in 1898, brigadier-general and commissary-general in December, 1900.

Besides his picturesque service in the Civil War, he took an active and honorable part in the Indian campaign of General Custer, and in the Spanish-American War. Of his service in the latter, ex-President Roosevelt writes:

There were, of course, department heads and bureau chiefs and assistants who, in spite of the worthlessness of the system, and of the paralyzing conditions that had prevailed, remained first-class men. An example of these was Commissary-General Weston. His energy, activity, administrative efficiency, and common sense were supplemented by an eager desire to help everybody do the best that could be done. Both in Washington and again down at Santiago we owed him very much. When I was president, it was my good fortune to repay him in part our debt, which means the debt of the people of the country, by making him a major-general.

In October, 1895, General Weston was made a major-general and transferred back to the line. He succeeded General Wood in command at the Philippines on the latter's return to the United States; in the winter of 1908 and '09 he was placed in command of the Department of California with headquarters at San Francisco, and was retired (for age) in 1909.

General Weston is survived by his widow and two daughters, residing in Briarcliff, New York.

His connection with the Institute as a special student in chemistry, from 1881-1884, was due to his recognition of the importance of chemical training for his work in the Commissary Department. In regard to his Institute training, he wrote some years ago: "As to the benefits I derived, I could not well estimate them; that they were valuable and assisted in making me, I have no doubt whatever. I pretty fairly inoculated the department in which I served with most of the theories and practices of the Institute."

General Weston, with no lack of dignity or reserve power, had among his Technology friends no trace of the stiffness which is sometimes manifested by military officers. His jovial warm-heartedness endeared him to all of us and it was a source of no little regret that infirmities of later life made it difficult for us to see him oftener.

Some of the striking details of his Civil War service were quoted in Volume II of the *TECHNOLOGY REVIEW* from the *National Magazine*.

The marriage is announced of Miss Frances Robinson, daughter of Mr. and Mrs. C. Snelling Robinson, at Youngstown, Ohio, December 1, 1917.

1885.

ISAAC WHITE LITCHFIELD, *Secretary*,
1712 Eye Street, N. W., Washington, D. C.

The newspapers recently announced that Alexander McKim, dam inspector in the service of the New York Conservation Commission, has been awarded \$10,000 damages by a jury in the Supreme Court sitting in Plattsburgh, in his suit against the Rutland Railroad. McKim's automobile was struck by a Rutland milk train near Mooers Forks in November, 1916. Evidence was given that the warning whistle had not been blown until the crossing was passed and the automobile struck.

Harry Talbot is one of the six of the country's foremost chemists who have been called into the service of the Government to serve on a special board to investigate explosives and the use of gases in warfare. This committee was named by Secretary Lane to act as a board of advisers to the Bureau of Mines. The Board will go into the subject of increasing the production of materials used in explosives manufacture, and will advise the Bureau in the operation of the recently enacted law regulating the sale of explosives.

Everett Morss has been honored with an appointment as a member of the Priority Board in Washington, having the special duty of determining priority in shipments of copper. His address is: The Burlington, Washington, D. C.

Charley Richards has at last succumbed to the inevitable. Announcement was made in November of his engagement to Miss Hulda Mulhauser of Cleveland, Ohio. They are to be married on December 27 and will live in New York.

The secretary had a very delightful session recently with Hayward Cochran in Chicago. Cochran's son is now a student at the Institute.

Litchfield is now connected with the Department of Labor, Washington, D. C. His address is: 1712 Eye Street, N. W. Shortly after the new year he started on a two months' trip through the Northwest in the interests of speeding production for the Shipping Board.

1887.

EDWARD GALBRAITH THOMAS, *Secretary*,
360 Rockingham Street, Toledo, Ohio.

H. C. Spaulding, recently appointed a captain in the Ordnance Division of the Army, has been assigned to active duty in the purchasing section, Gun Division, in Washington.

1888.

WILLIAM G. SNOW, *Secretary, 24 Milk Street, Boston, Mass.*

The secretary has heard very little news of value from the members of '88 recently, but as to war activities would say that S. E. Thompson has recently been appointed major of engineers; F. J. Wood received a similar appointment some time ago; George D. Moore is a captain in the regular army; Miss Frances Webster, daughter of E. S. Webster, is engaged abroad in the service of the children; Shepard L. Williams, son of Arthur S. Williams, is a first lieutenant stationed at Camp Meade.—Major Fred J. Wood, Engrs. U. S. R., writes:

I was called into active service as Major, Engineers, United States Reserves, on the 18th day of October, and was assigned to the Cantonment Division, Quartermaster General Department. That division in due course assigned me to the staff of Constructing Quartermaster in charge of the construction of the Curtis Bay, Md., Ordnance Depot. I am now engaged as one of the assistants to that officer, my duties being engineering supervision of all lay-outs, dredging, soundings, drafting and constructing of railroad, of which there are about eighteen miles.

Bates has a son "overseas" in the Aviation Section. He went in July in the first squad. When he enlisted last February he had his pilot's license from the Aero Club and after a little military training was sent over for advanced training.

1890.

GEORGE L. GILMORE, *Secretary, Lexington, Mass.*

A double wedding occurred October 6 at the residence of Mr. and Mrs. John L. Batchelder, when their daughters were married at noon of that day, Miss Sabra to Mr. Bartlett Harwood of Newton, and the younger sister, Miss Rosamond, to Mr. John King Hodges of New York City. More than six hundred guests were present from New York, Philadelphia and Boston. Both girls are members of the Vincent Club. Mr. Harwood is a Harvard, '15, man and Mr. Hodges of Harvard, '14. Following the ceremony a reception was held at the Batchelder home.

The control of the Chicago, Rock Island & Pacific Railway was changed at a meeting in Chicago, October 11, and among the directors elected were two of our classmates, Charles Hayden and Prof. W. Z. Ripley. Hayden has been a director of the Minneapolis & St. Louis Railway; also with his associates under the name of "J. L. Bruce Trustees" has taken over about two hundred acres of silver-zinc bearing ground in the southwestern part of the Butte district, west of the Emma property of the Butte Copper & Zinc Co. in behalf of Butte & Superior.

W. L. Creden, managing director of Butte-Detroit Copper & Zinc Mining Company, who was in Boston October 16, 1917, said:

"Manganese operations at the Butte-Detroit have been successfully launched. Shipments of ore have begun to furnaces in Illinois and Pennsylvania. The grade of manganese concentrates produced at the Butte-Detroit mill is high, and the demand for its product is most satisfactory. Contracts for the delivery of ore have been made through Rogers, Brown & Co., pig iron and ferromanganese merchants of New York."

We regret to report the death on September 12 of our classmate, Thaxter N. Tripp of Lynn, who was 49 years of age and has always lived in Lynn, where he was for many years engaged with his father in manufacturing. Thaxter had been in poor health for a long time and he is survived by his widow.—Harry A. Kennicott's address is 301 Thirteenth Street, Nebraska City, Neb.—Wisner B. Martin is at 50 Highland Avenue, Cambridge, Mass.

Letter received from Daragh de Lancey under date of November 14 from Virginia Hot Springs, where he has gone for a rest after four months of strenuous work on one of the Connecticut State Exemption Boards, before being called to do his bit on the next draft. He had been secretary of his board and had had as many as twelve clerks working under him at one time. His office passed about eight thousand men. On account of his duties on the Examination Board he declined the Republican nomination for Mayor of Waterbury. As the result of the election was a landslide for the Republican party, it looks very much as if Daragh had escaped a political life for the next year.

The *New York Times* for October 16, 1917, has the following account about C. W. Rice:

American inventors have made great strides in improving methods of attacking aircraft, it was stated yesterday by Calvin W. Rice, secretary of the American Society of Mechanical Engineers, who spoke on "The War Activities of the Technical Societies" before the Engineering and Research Section of the Southern Commercial Congress at the Hotel Astor.

An American inventor, Mr. Rice said, working in connection with the National Research Council, has developed a device for locating airplanes by sound, an invention which makes impossible a surprise attack by airplanes, and which enables a warning to be given in time, so that airplanes may be sent to attack the aircraft whose approach is detected.

Another invention of American genius, strengthening defense against aircraft from land or from warships, is an improved fire-control device for regulating the fire of anti-aircraft guns. Another American invention of great importance in air fighting and in making observations of the enemy from aircraft is an adaptation of the wireless telephone which makes it possible for one aircraft pilot to telephone to another while both are in the air.

One subject under investigation, which Mr. Rice touched on, was an application of the principle of locating airplanes by sound to the problem of finding the range of enemy artillery by the report of their firing. A number of American scientists are at work on this method of searching out enemy batteries behind the lines—a novelty of American origin in modern warfare, which is called "sound ranging."

Other American steel experts are at work, Mr. Rice said, in experimenting with a great many forms of steel protection to save soldiers in and out of the trenches from rifle and shrapnel fire. Mr. Rice said that it was believed that important progress was being made in this respect, but that no detail of protective armor being developed could be made known at this time.

One of the greatest achievements of American energy and scientific skill, Mr. Rice said, had been that of improving the manufacture of the optical glass required in all sorts of military and naval service, such as periscopes, range-finders, sights, and field glasses. Until the war began the United States had been almost solely dependent on Germany for optical glass, and the only modern periscopes in the United States Navy two years ago were of German manufacture.

Inventions and proposals for improvements in naval fighting apparatus were coming to the Naval Consulting Board at the rate of more than two hundred a day, the speaker said, and this made necessary the continuous voluntary service of a large number of representatives of technical societies, in order that everything submitted to the Naval Consulting Board should have a fair hearing.

Phinehas Varnum Stephens, a consulting engineer of this city and chairman of the Engineering and Research Committees, urged that this country should not make the mistake, which England and France were now repenting, of stripping universities and technical schools of instructors in engineering and half-trained engineering students. He added that it would take five or six years to repair the mischief done if a wholesale movement to the army of students and professors took place from technical schools.

Calvin W. Rice is also on a committee in New York to recruit 15,000 men for the Repair Base in France. His committee has charge of the financing and getting the men off, and each of them costs from four to five dollars per man extra. Cal has been busy on many committees, among others being the Professional Class War Relief and the Refugees War Relief. He is also treasurer of his church in Upper Montclair, N. J., and during the past year has built a new Sunday School at a cost of \$21,000 that is now free of debt, and on which he was chairman of the building committee.

In addition to the circular recently sent out to members of the class regarding the Technology War Relief, we have just learned that Schuyler Schiefelin is captain in the U. S. Regular Army and is now in France in aviation work.—C. H. Alden is a captain and has been ordered to Camp Grant as supply officer of the Ambulance Section, 311, San. Train., 86th Division.—Rev. Willard H. Root's address is now 73 Park Street, Mansfield, Mass. Since the first of May, Willard has had charge of two Missions, one in Mansfield and one in Sharon, and is doing his usual good work.

Responses to our class appeal have certainly been most gratifying, as it is evident that all we older fellows who are unable to go to the front, where some of our classmates are located, are willing to do our bit with our hand in our pocket wherever possible.

1891.

F. A. WILSON, *Secretary*, Nahant, Mass.

Boys, a thought for Guy Mitchell, one of the quiet boys, when we knew him at Tech—and of whom we have seen too little in later years.

Guy E. Mitchell died in Westfield, Mass., on October 17, 1917, after a brief illness with pneumonia. He was born in Lowell,

Mass., a son of George E. and Elmira C. Mitchell—and a member of Technology '91—also of the American Society of Mechanical Engineers. He was with the B. & M. Railroad for several years, working upward; then he had experience with electric railroad work; and with automobile truck building at Pittsfield. In 1914 he was made manager of the Westfield Municipal Gas and Electric Light Plant, in which position he won friends and praise. A local paper says: "In his death the town loses an official who has earned the sincere respect of every citizen."

Mitchell left a widow and two daughters (Corinne, aged six, and Rosamund, aged three). He had no living brothers or sisters. His widowed mother lives in Medford.

It must be the secretary's duty, as time passes, to record the stepping aside of one after another of our number. Our season on earth is brief; our time is too short to do much for ourselves or for the world; out of many lessons let us remember the "ties that bind," and let each loss we suffer be a bond increasing the union and fellowship which is, after all—and beyond all the philosophy of ancient and modern thinkers, the chief thing we can get out of life—and perhaps the best thing we can put into it.

Arthur Hatch and his wife have done a war song—Arthur looks too well fed to be a poet, doesn't he? Perhaps his wife pampers him—anyway, the words are his and the music his wife's—a reversal of some marital combinations. "A Song of Freedom," by Arthur E. and Anna M. Hatch. "Let all who breathe partake"—but the secretary can go no further—he is not a musickaner.

'91 men have already been told by circular what is their privilege and honor relating to the Tech War Fund. Isn't it fine to be able to help in some way? Troublous times? Yep, we agree, the secretary is no war contractor, but what of it? We all wear a harness, now (at forty-six to fifty-one) well fitted to us—go give an extra strain at the collar and dig in your toes. Of course your check is already sent—"many thanks" is so common a phrase we almost repeated it. But why should we expect thanks for helping our country and ourselves?

Soon we must find time and make opportunity to recognize our Mrs. Cunningham as a Technologyite (looks like a geological work, doesn't it), and as a true '91 spirit.

News of '91 men in the war service is not plenty, some was given in the last REVIEW, more is wanted, send it to us. A letter from Bassett shows a wish for the building of greater fellowship among '91 men; so do we all, so each do his part. We're all respectable and companionable, and we're getting old—if you throw any eggs let them be fresh ones at seventy-five per—the secretary has a soft mitt in which to catch them.

The letter expressing a wish to keep class photographs brought a few responses; we are waiting for the last one that's coming, to

get here—then to action! Silence gives consent—the class archives have some dandy photos.

On Thanksgiving Day the Class of '91 gave a dinner and club privileges at the University Club in Boston to about fifty-five aviators studying at Tech. The affair was a great success, the men both enjoyed and appreciated. Keep it up, boys, we are too old to go, let us help in other ways. On Christmas Day we did the same thing—only changes and leaves reduced the number to about a score, although our spirit was the same in volume. Yes, some of your money goes for this. Kash Kills Kaiserism. Germany calls America "Dollerica"—we will show various uses for "them dollars" at any rate. Many thanks for saving time by sending your check promptly—"he who gives quickly twice gives." Come across before the Kaiser does.

1892.

GEORGE H. INGRAHAM, *Secretary*, 2040 E. 107th Street
Cleveland, Ohio

C. H. CHASE, *Assistant Secretary*, Tufts College, Medford, Mass.

Captain Theodore Skinner, U. S. R., is constructing quartermaster at Camp Dix.

Major Murray Warner, U. S. R., is in charge of the Public Utilities, also at Camp Dix.

1893.

FREDERICK HAROLD FAY, *Secretary*,
308 Boylston Street, Boston, Mass.

GEORGE B. GLIDDEN, *Secretary*, 551 Tremont Street, Boston, Mass.

Mr. Edward McKim Hagar, president of the American International Steel Corporation, died at his home, No. 960 Park Avenue, of pneumonia, after a brief illness, in his forty-fifth year.

He was born in Salem, Mass., and was graduated as an engineer from the Massachusetts Institute of Technology in 1893 and from Cornell University in 1894. He formerly was president of the Universal Portland Cement Company, and a short while ago became president of the Wright-Martin Aeroplane Company, of New Brunswick, N. J. At the time of his death his offices were in the Equitable Building.

Mr. Hagar for many years made his home in Chicago, Ill. He was a member of numerous clubs, including the University, Riding, New York Yacht, and Engineers, of this city, and the Union League, University, Onwentsia, Chicago Yacht and Western Society of Engineers of Chicago. He leaves his wife.

1894.

SAMUEL CATE PRESCOTT, *Secretary, M. I. T., Cambridge, Mass.*

George Portner died at 3 o'clock, December 15, at his rooms at the Portner apartments. He succumbed to an attack of pneumonia after a brief illness. The funeral was held Monday at 2 p.m. at the apartment.

Portner was born at Manassas, Va., in 1874, and was the son of Mr. and Mrs. Robert Portner of that place. He was educated at the Boston Institute of Technology and at George Washington University, where he afterward lectured on chemistry. He was a chemist of high standing, having been connected with a chemical business in this city for a number of years, although he has not been actively interested in business for several years, owing to ill health.

He is survived by his wife, who was Miss Moncurefi of Virginia; a two-year-old son, four sisters—Mrs. Henry D. Flood, wife of the Congressman; Miss Hildegarde Portner, Mrs. William P. Meredith, of this city; and Mrs. Arnold Kohler, of New York; and three brothers—A. O., Paul V., and Oscar Portner.

1895.

W. D. PARKER, *Secretary, 12 Bosworth Street, Boston, Mass.*

The following is the list of '95 men in service, so far as the secretary has been able to locate them to date:

Azel Ames, major, New York, C. A. C.
D. E. Aultman, major, War Department, Washington, D. C.
D. W. Burkhalter, captain, E. O. R. C.
P. M. Churchill, major, 2d Battalion, 304th Regiment of Engineers, Camp Meade, Admiral, Md.
W. B. Claffin, captain, E. O. R. C.
Parker H. Kemble, Sea Service Bureau.
Hermann Kotzschmar, Jr., first lieutenant, Engineers U. S. Coast Guard.
W. S. Rhodes, first lieutenant, E. O. R. C.
W. P. Robins, first lieutenant, Statistical Office, 79th Division.
William B. Stork, Ensign, U. S. N.
T. H. Wiggin, captain of Engineers, now in France, working in connection with water supply problems for new U. S. camps.

NOTE. The Institute is endeavoring to obtain the names of all Tech men in Government service. There are between eighty and ninety '95 men who take the "Review," and if each one of these would send to the secretary, the names of any of the class about whose activities they know, it would be a great help in making a complete list for '95. Without doubt, there are many more who are doing work than the above list indicates.

NEW YORK ITEMS. Schmitz contributes the following items, which, he says, about cover the news in New York and vicinity:

L. K. Rourke is with the Chile Copper Co., in Chile.—F. C. Schmitz has been elected treasurer of the Technology Club of New York.—Swope is still in Russia, with his family.—M. Fish had a fire in his factory in Buffalo. He also recently had a second addition to his family.—Walter Marmon is building aeroplane motors in his factory at Indianapolis.—The class has forty-five men in the Technology Club of New York—some record.—J. D. J. Moore, recently in partial political eclipse, is not displeased at the recent election in New York.—Ira Nay writes:

I have tried, but so far unsuccessfully, to get into the service in any capacity that I could acceptably fill. This has been of no avail, and I have tried to get into the Red Cross for foreign service, also without success. I have now offered my services to the Y. M. C. A. and have a little hope that they may be accepted. Of course, I am forty-four (forty-five on March 1, next), but I am in fine condition, can walk ten miles as fast as any one and am really more "fit" than I ever was before. Besides, it is my notion that a man forty-five, with twenty years' business experience back of him, is in reality better equipped to take charge of supply depots and the like than are younger men who can do more strenuous jobs, and who lack, of necessity, the older man's experience. If you know of anything that is open that I might make an application for, kindly let me know. During the Red Cross drive I had charge of the publicity for Androscoggin County. During the Y. M. C. A. Red Triangle drive, recently held, I acted in a similar capacity. Of course, like all of us, I have contributed as much as my means will allow to everything that seems to me necessary, not by any means to everything that I am asked to contribute to, and to many I am unable to give from lack of funds. It is wonderful what the old M. I. T. is doing for the cause, and my only regret is that I am not personally doing my bit, as I want to,—in some active unit.

Nay is certainly a handy man to have around, even if he has not been able to get near the trenches.

Crane writes as follows:

I am not doing anything in a military way for the Government at the present time, although I have advised on some engineering matters connected with aviation. Industrially, I am chief engineer of the Wright-Martin Aircraft Corporation, located at the Simplex plant in New Brunswick, N. J. Two years ago, when this company was organized, I was sent abroad to pick out an aviation motor for construction. We became the first licensee under the Hispano-Suiza patents, at the time when this motor was first being produced. We have worked on it since then, and since the start of the war the whole plant has been turned over to its construction. I have held so closely to this work that I have had no opportunity to meet other '95 men. I imagine, however, that you will find a very large percentage of them are helping in some way at the present time.

The Boston *Globe* of November 14 contained the following article about Kemble:

Parker H. Kemble, one of the best known engineers hereabouts, has entered the Sea Service Bureau at the national headquarters of Henry Howard, director of recruiting for the United States Shipping Board, at the Boston Customhouse, for the duration of the war. He is one of a group of technically trained men who are giving their whole time to the Government in the present emergency. His home is at 293 Marlboro Street, Boston.

In 1914-15 Mr. Kemble spent a year in his own boat, cruising 4000 miles on inland rivers, studying conditions of navigation, terminal facilities, etc., for the

Government. Recently he has been doing considerable photographing from airplanes for the Government.

Mr. Kemble was born February 15, 1872, at Boston. He was educated in Polytechnic, Dresden, Germany; at Harvard University, and Massachusetts Institute of Technology.

In 1898, 1899 and 1900 he was inspector of hull construction for William Cramp & Sons, Philadelphia. He has since held responsible engineering and other positions with the Columbia Engineering Works, Brooklyn, of which he was superintendent in 1901; the Boston Elevated Railway Company, Brooklyn Edison Company, Toronto Electric Lighting Company, Cincinnati Gas and Electric Company, and the New York and Queens County Electric Light and Power Company.

Mr. Kemble holds a first-class pilot's license, second district, for any tonnage; a gas engine license up to 3000 tons, and a chief engineer's license for ocean steam vessels of 500 tons.

He was a Plattsburg sergeant in 1916, and qualified as a sharpshooter and platoon leader.

Mr. Kemble is a member of the American Society of Mechanical Engineers, the Canadian Society of Civil Engineers, and an associate of the United States Naval Institute. He is a part member of the American Institute of Electrical Engineers and the American Society of Civil Engineers, and an associate member of the Society of Naval Engineers.

The following changes of addresses have been received:

Frank M. Brininstool, 1205 North Stoneman Street, Alhambra, Cal.—Sidney K. Clapp, Board of Water Supply, New York, Grand Gorge, N. Y.—Arthur D. Dean, Teachers College, New York, N. Y.—Walter S. Williams, Mount Hope Finishing Co., North Dighton, Mass.

Correction of addresses: F. A. Hannah's address was given incorrectly in the last issue of the REVIEW. It should be, F. A. Hannah, 32 West 40th Street, New York, N. Y.—F. L. Howard's name was omitted entirely. His address is, F. L. Howard, 108 Washington Street, Swissvale, Pa.

1896.

CHARLES E. LOCKE, *Secretary*, M. I. T., Cambridge, Mass.

J. ARNOLD ROCKWELL, *Assistant Secretary*,
24 Garden Street, Cambridge, Mass.

The secretary had hoped to report a lot of news in this issue regarding the various war activities of '96 men, but it has been impossible to get this up to date and the following items are all that have been gathered:

Major W. G. Wall is working in this country on motors for tanks.—C. H. Young of the Armstrong Cork & Insulator Co., Pittsburg, is moving to Washington to take up a permanent residence.—R. E. Bakkenhus is C. E., U. S. N., Bureau of Yards and Docks, Washington, D. C.—T. W. Bailey is first lieutenant, E. O. R. C., Section E, 301st Infantry.—D. M. Bates is major, Ordnance Supply Division.—R. C. Clark is second lieutenant, Cavalry, National Army.—W. H. Clifford is a major, National Army Infantry.—M. L. Fuller has moved to Philadelphia, having

accepted a position with the Sun Company. The following was taken from a Brockton, Mass., paper:

One of the highest salaried geological positions in the country has just been accepted by Myron L. Fuller of Brockton, Mass. This position is that of chief geologist of the Sun Company of Philadelphia which, though less widely known than the Standard Oil, is, nevertheless, one of the big petroleum companies of the United States, operating its own refineries and lines of tank steamers to Europe. Its subsidiaries also operate large shipyards, engine works, etc. Mr. Fuller will have entire charge of the geological operations connected with the development of petroleum, both in this country and abroad, and will be assisted by a corps of experienced geological assistants. Geological investigations are now under way in West Virginia, Ohio, Wyoming, Kansas, Oklahoma and Texas in the United States and in Honduras in Central America. Investigations in Cuba, Venezuela and Argentine have recently been completed.

Mr. Fuller is the son of Mr. and Mrs. Albert H. Fuller, his father being the publisher of the *Daily Enterprise*, and is a graduate of the Brockton High School and the Massachusetts Institute of Technology. He gives to Edward Parker, then principal of the High School and also teacher of geology, the credit of arousing, through his lectures, the enthusiasm for the science that he later made his life work. Mr. Fuller after graduation became an instructor at the Massachusetts Institute of Technology, from which he went to the United States geological survey, where he became chief of the section dealing with the geology of water supplies, on which subject he became an international authority, widely quoted in Europe, Australia, etc. Of late years he has been consulting expert on water supplies for San Francisco and other cities, on dams for large waterpower projects and on petroleum and natural gas developments. In the latter capacity he headed a few years ago an exploring expedition into central and western China, during which he covered some 8000 miles on horseback and penetrated some sections never hitherto visited by foreigners. Mr. Fuller has also been interested in the cranberry business and was for some years vice-president of the Cape Cod Cranberry Association. Mr. and Mrs. Fuller plan to give up their home in Spring Street and move to Philadelphia, where the main offices of the company are located, in the near future.

George K. Burgess has recently published Bureau of Standards Paper No. 296, on "Thermoelectric Measurement of Critical Ranges of Pure Iron."

Thanisch has filled in application forms for the War Department and is ready to respond whenever his services are desired. In the meantime he is filling in the time working in the Division Engineers' Office for the Highway Department of the State of Arizona.

M. C. Tuttle has been in Washington the greater part of the time ever since war was declared by the United States. During the year 1917 his work was connected with the Construction Board of War Council of National Defense. Recently he has been made manager of the Division of Production of the United States Shipping Board Emergency Fleet Corporation.

Paul Litchfield, while not directly in military work, is, nevertheless, as factory manager of the Goodyear Co., engaged in the development and production of dirigible, kite and spherical balloons, gas masks and truck tires for all branches of the service.

Leland has also tendered his services to the Government along the line of naval construction but has not received any call as yet.

New addresses for '96 men are as follows:

M. L. Fuller, Chief Geologist, Sun Co., Finance Building, Philadelphia, Pa. Residence: 143 West Upsilon Street, Germantown, Pa.—Julius F. Gaylor, 8 Beacon Street, Boston, Mass.—Frederick F. Schaller, Bureau of Valuation, Interstate Commerce Commission, Washington, D. C.—Frank A. Thanisch, P. O. Box 938, Clifton, Ariz.—Charles A. Wentworth, Chief Engineer, Foundation Co., New York, N. Y.—Conrad H. Young, Room 210, Riggs Building, 15th and G Streets, Washington, D. C.

1897.

JOHN ARTHUR COLLINS, JR., *Secretary*,
67 Thorndyke Street, Lawrence, Mass.

In the September number of the *South Shore Country Club Magazine*, published at Chicago, H. M. Deavitt, V, has an article entitled "How M. I. T. Aids Uncle Sam." Mr. Deavitt gives a general description of Technology and her buildings and describes the Army and Navy courses being given. He also tells what the undergraduates have been doing towards preparing themselves for military service.

A. L. Parsons, I, is acting chief of the Bureau of Yards and Docks, Navy Yard, Washington, D. C.—Prof. C. B. Breed, I, has been elected one of the Governors of the Boston City Club.—Through a mistake of the secretary, a wrong address was given for Mr. Wilfred Bancroft in the previous number of the REVIEW. Mr. Bancroft is general manager of the Slatersville Finishing Co. at Slatersville, R. I., and not Saylesville, as first given.—William A. Kent, I, now holds the rank of lieutenant-colonel in the United States Army, and is at present stationed at Camp Pike, Arkansas. Kent, it will be recalled, entered the regular army shortly after graduation, and has seen service since that time in about all of the United States territorial possessions.—H. D. Jackson, VI, writes as follows regarding his war activities:

In September was called in by Monks & Johnson of Boston to take care of the plans and specifications for the heating, plumbing and lighting for the Emergency Hospital Building at the Chelsea Naval Hospital. This rush work was gotten out in three weeks' time. At the same time, work was being done in connection with the Power Station and other buildings at the Watertown Arsenal, which meant night and day work. We also have the work of designing and supervising the construction of the new Destroyer Plant at Squantum. This means three plants: one at Boston, one at Buffalo and one at Providence. I have charge of the steam, air and sprinkler layouts and somewhat to do with the electric work. We have about one hundred and twenty-five draftsmen engaged on the work.

Walter E. Spear, XI, who for some time past has been department engineer with the Board of Water Supply, city of New York, has been supervising construction work at Camp Upton, Yaphank, Long Island. He has been recently made a major in the Quartermaster's Division at the same camp.

The secretary has received the following letter from Lieut.-Col. William A. Kent, Infantry, N. A., Camp Pike, Ark.:

As it has been some time since I wrote you, so long that I forget when the last time was, I will go back a few years. Mine has been a wandering life since I came into the army in 1899. I have never been two years in any one place, the nearest being the year and eleven months at Fort Leavenworth, Kan., where I graduated from the Army School of the Line in 1912 and the Army Staff College in 1913.

From there I went to Galveston, Tex., where I was a member of the 5th Brigade Musketry Board, which did some rather important work in getting the army started on a more strenuous program of musketry work. I would have been there over two years if it had not been for the Vera Cruz interlude. I was with the 4th Infantry at that time and we spent our seven months there on outpost duty in the sandhills on the edge of the city. If we had been allowed to go outside of our lines, we would have had an interesting stay but, being closely confined to the city, it was rather monotonous and we were glad to get back to Galveston.

When we were drowned out by the Galveston flood, we went to Brownsville, Tex., and we were just as glad to get away from Galveston as we had been glad to get back to it. We had been at Brownsville only a few days when my company was sent to San Benito on a special midnight train to repel an expected bandit attack, which did not materialize. I stayed there for about three months, first guarding a district of some twenty square miles east of San Benito, then was moved to the Rio Grande and had about six miles of the river to look after. We went back to Brownsville the first part of January, where there was a little more excitement. Shortly after the Columbus raid, we had very authentic information that we were due for a similar performance and that the houses of all officers and prominent civilians had been spotted, as at Columbus, for attack. So for two months we packed a grip with our toilet articles, my wife's jewelry, and some other things every night and put it near the door where we could grab it on the way out.

Then there was a change of administration on the Mexican side and we felt more secure. This was especially gratifying to me, as I was detailed as brigade adjutant of a National Guard Brigade and sent to Llano Grande, Tex., about forty miles from Brownsville, on July 31, 1916, and I had to leave my family in Brownsville. I held this position for two months, then was sent to the School of Musketry, now the Infantry School of Arms, Fort Sill, Okla., as instructor. There I was assistant commandant, in charge of personnel records, then director of the Small Arms Department, which position I had when appointed lieutenant-colonel, National Army, in August, 1917, and ordered here.

Here I was in charge of three battalions of the 162d Depot Brigade until the 87th Division School of Arms was organized, the first part of November, when I was detailed as assistant commandant, the commandant being the division commander, *ex-officio*. This work is very interesting and I hope to keep it for a while. I have classes in Grenades, Bayonet Fighting, Musketry, Automatic Rifles, Machine Guns, Field Fortifications and Trench Mortars. Owing to lack of supplies, the instruction in Gases and Gas Defense has not yet been started. Three French and four British officers are here as instructors in certain of the above. All of the French officers have the Croix de Guerre with from two to four citations.

I believe that this covers my activities with the exception of three months of the time when I should have been at Fort Sill, but was travelling up and down the Atlantic States, from Pennsylvania to North Carolina, first mustering out National Guard organizations, then mustering them in again after the second call. I was mustering out the Richmond Blues, they were so near out that they were being paid off, when the telegram came to hold them in service. They were a sore lot for a few days; not that they were unwilling to serve, but they did want a chance to go home for a few days and rest up.

If you know of any Tech men around Little Rock, let me know. Being limited as to the amount of baggage I can carry, I have not my "Register of Former Students"; it would probably be of little use now, anyhow.

Address: Lieut.-Col. William A. Kent, Infantry, N. A., Camp Pike, Ark.

1899.

W. M. CORSE, *Secretary, 106 Morris Avenue, Buffalo, N. Y.*

Mr. George H. Priest writes:

My entire attention is devoted to the Brockton Gas Light Company, of which I have been general manager for the last year and a half, and any chronicle of events would be to a large degree the history of the affairs of that company. A word about our activities in the line of Government service might be of interest. We supply not only Brockton, but nine surrounding towns in most of which gas is used to some extent for the manufacture of shoes and most of the local firms are manufacturing a considerable number of army shoes. We are supplying gas also to the Sterling Motor Company, which is turning out large quantities of 1-pound shells for the Government and Allies. We have been requisitioned by the Navy Department for coke to be used at the Charlestown Navy Yard this winter and are considering the installation of a toluol recovery plant to wash the light oils from the gas and turn them over to the Government for the manufacture of explosives. For a plant of our size this will be a labor of love and patriotism without any substantial pecuniary return.—Our company has sent twelve men into active service, and several others expect to leave soon. Out of a payroll of about two hundred, in which the laboring class predominates, ninety-eight employees subscribed to the first issue of the Liberty Loan—a total of \$5850. The response to the second issue was not so heavy, but, everything considered, was very gratifying. We feel that we are playing some small part in the great work.

Like all other public service corporations, we are suffering severely from the same causes which are making other industrials rich. Increased prices for coal, oil, and labor have added about \$75,000 to our annual operating expenses and about 25 cents per thousand to the production cost of gas. Our worst difficulty has been the congestion of railroad transportation. Our coal supply ran out in August, and I found it necessary to go to Washington and interview the various coal and car service committees. Washington was enjoying a temperature of 110 degrees in the shade at the time of my visit, and it is needless to say that I did not linger there very long to look up Technology acquaintances. The main object of the trip, however, was successful enough so that we now have our coal supply insured for the winter.

The only '99 man I see with any regularity is Eaton of Waltham, who is as busy as ever as assistant superintendent of the Waltham Watch Company. He has probably advised you that he is the father of a year-old son, who he prophesies is going to be some football player.

We are all, of course, very much interested in the war work which the Institute is carrying on and I, for one, have subscribed all the financial support which can be spared in these times of daily giving. I had the pleasure of travelling from New York to Boston with Professor Miller, who, as you probably know, is engaged in the very interesting business of organizing marine engineering training schools. He is certainly doing a great work and apparently stands at the head of his profession today.

Alexander R. Holliday writes he has just been appointed Assistant Federal Fuel Administrator for Indiana; the work has been taking up the major portion of his time as conditions in Indiana are quite critical. There is no salary attached to the work, but there is an opportunity to do a great deal of pioneer work which will be interesting.—C. D. Drew writes he was commissioned Captain in Engineer Officers Reserve Corps while at Plattsburg in June, was assigned to active duty with the 1st Reserve Engineers (now the 11th Engineers, Railway) and went to France in July. Address, care this Regt. U. S. E. F., France.—Benjamin S. Hinckley writes under date of November 17 that he is moving to

Washington with his family for an indefinite period in order to work with the Fuel Administration. His office is Room 6226, Department of the Interior Building, F and 17th Streets, Washington, D. C.—The body of Richard C. Harrison, '99, of Braintree, a mining engineer, was found in the harbor channel, fastened to the anchor line of a dory. The medical examiner decided that Mr. Harrison had committed suicide by plunging overboard from the boat after binding the anchor to his body.

In Active Service.

J. K. Clark, M.M. 2d U. S. N. R. F. Sub. Chaser.—C. D. Drew, Captain 11th Railway Engineers, in France.—J. H. Richardson, Captain in E. O. R. C. Stationed at Training Camp at Belvoir, Va.

1900.

INGERSOLL BOWDITCH, *Secretary,*
111 Devonshire Street, Boston, Mass.

An informal dinner was held at the Walker Memorial on Wednesday evening, December 12, the following men being present: Ashley, Bowditch, Bugbee, Conant, J. B. Cutting, Davis, W. W. Emery, Remington, Richardson, Russell, Walworth, Wedlock and Wentworth. The regular table d'hote dinner was served and there was no limit to the sugar.

After the dinner Bowditch explained the work which the Institute is doing to help those Tech men who are engaged in war work, and called attention to the circular letter which was about to appear. At the annual meeting of the class secretaries it was hoped that each class would contribute at least \$100 a month for twelve months. If every member who receives an appeal should send what he thinks he can afford there is no question that the class can supply its quota. It is not fair to let just a few men share all the expense. Subscriptions have been received in answer to a circular sent out by the Institute committee from some of the men varying from one dollar to fifty, and a monthly subscription of five dollars and one of one dollar have also been promised.

Future meetings of the class were discussed and it was decided to appoint someone to take care of them. Walworth will look after the next meeting which will probably take place in February. The mailing list for notices of these meetings contains about fifty names. If any member of the class who would like to come and who is not on the mailing list will write to the secretary, he will be glad to see that notices are sent him.

A letter was received from Jim Batcheller who sent his best wishes to the class. He has just recovered from an operation for gall stones and incidentally had his appendix removed. He now belongs to the "independents." He saw Leach, who reports that

business and military conditions in Washington were like a huge whirlpool.

In the last letter it was announced that Gibbs had been given a commission as chaplain in one of the western regiments. This fell through somehow, and now he is at St. Ann's Church, N. Y. Perhaps the men in the regiment did not like Gibbs' kind of religion.

It is reported that Suter has been made a captain in the Engineers Reserve Corps and has probably gone across. He took the course at the American University, Washington, for engineer officers.

C. A. Barton, Jr., has been made captain in the Engineers Officers Reserve Corps and T. W. Brigham an ensign in the Navy. The following changes of address have been received:

Charles J. Bacon, 12 South 5th Street, Navarre Apartments, Wilmington, Del.—Rev. George C. Gibbs, Saint Ann's Church, 140th and Saint Ann Avenue, New York, N. Y.—Henry D. Jouett, 2287 Loring Place, New York, N. Y.—Daniel E. Maxfield, Moorestown, N. J.—Morton C. Mott-Smith, 355 Harvard Boulevard, Los Angeles, Cal.—Albert P. Stock, 5 South Euclid Avenue, St. Louis, Mo.—Capt. Russell Suter, Engineers Officers Reserve Corps, American Expeditionary Forces.—Arthur B. White, 1490 Seventh Street, Riverside, Cal.—Fred B. Wilder, Technology Club, 17 Gramercy Park, New York, N. Y.

1901.

ROBERT L. WILLIAMS, *Secretary*,
70 Waban Hill Road, Chestnut Hill, Mass.

November 27 the class had a luncheon at the Boston City Club which was enjoyed by all. On account of the few men present at the dinner last June, the election of officers was postponed. Accordingly, an election was held at the luncheon. Edward Seaver was elected president, and R. L. Williams, against his protest, was elected secretary-treasurer for the duration of the war. The following were present: Boyd, Chandler, Taft, Seaver, Holmes, Whittemore, Appleton, Brigham, Connolly, Hall, Allen, St. Clair, Derby, Skene, Read, Daloz, Scully, Brush, Healey, Aldrich and Williams. It was voted to hold another luncheon January 8 and continue thereafter to have one once a month.

Joseph D. Evans writes:

Since my last communication to you, I have resigned as assistant general manager of the agency of Canadian Car and Foundry Company, Ltd., and have incorporated The Evans Engineering Corporation, and at the present time am engaged in loading, assembling and packing large-size ammunition for the United States Government.

I have built a loading plant near Perth Amboy, N. J., and will soon be operating with a force of 600 men.

I would have joined the Engineers Corps and gone to France, had it not been for the fact that I was one of the few men experienced in loading ammunition, I

really having gained this experience with the Canadian Car and Foundry Company who had a contract for 5,000,000 rounds of 3-inch shrapnel and high-explosive shell, which contract was completed early last spring.

James F. Monaghan is a captain in the Ordnance Department, U. S. Army, and is located in Washington, D. C.—R. Whitman is in the Navy and stationed at the Naval Academy, Annapolis.—F. B. Driscoll is lieutenant commander U. S. N. R. F.—M. Estabrook is captain O. R. C. and inspects small arms.—C. Bittinger is first class machinist mate in the Navy.—R. H. Brown is captain Sanitary Corps, Fort Oglethorpe, Georgia.—G. I. Cross is captain 101st Engineers.—The above list includes all those of our class that are in the Army or Navy. The secretary would be glad to learn of any others.

The following is taken from the *New York City Journal of Commerce*:

The vacancy in the western New York State field of the Queen Insurance Company, caused by the recent death of the late Frank S. Tyler, has been filled by advancing from the home office of the company Roger W. Wight, who is a graduate of the Massachusetts Institute of Technology, and who was for several years special agent in the eastern New York State field for the Queen, and lately associated in the underwriting department of the home office. He has had a wide experience in the business, and the company is fortunate in being able to move forward to fill Mr. Tyler's place a man thoroughly familiar with the policy of the company and already acquainted with the business in the field which he is to cover.

Recent changes in address are: John R. Anderson, Jr., Willys-Overland Limited Automobile Co., Toronto, Canada.—Lester F. Miller, 1206 Chamber of Commerce Building, Pittsburg, Pa.—Reuben B. Clark, Wynnewood, Pa.—Capt. James F. Monaghan, Ordnance Department, U. S. Army, 1330 F Street, N. W., Washington, D. C.

1902

FREDERICK HUSTON HUNTER, *Secretary*,
281 Park Street, West Roxbury, Mass.

J. ALBERT ROBINSON, *Assistant Secretary*,
Box 135, Canton, Mass.

In addition to the classmates mentioned in the November REVIEW as having answered their country's call, the class can claim service stars for Major Harold Blanchard, 327th Infantry, National Army; Captain Waldo H. Comins, 164th Depot Brigade; Captain Lloyd B. Haworth, Quartermaster's Department. Norman Borden, whom we mentioned as commissioned Major in the last REVIEW, is attached to the 315th Regiment of Infantry in the National Army at Camp Meade, Md. Major Wadleigh of the Marine Corps was last heard from at Port au Prince, Haiti. Both the Mixters are Captains in the Medical Reserve Corps, Charlie being at Base Hospital No. 1 with the American Expedi-

tionary Forces in France, and Jason at Base Hospital No. 6. Harold Pope is Captain, Quartermaster O. R. C., detailed on airplane construction. J. Lookerman Taylor is a Captain of Engineers, O. R. C., with a railway regiment.

At the annual dinner of the Alumni Association held in the Walker Memorial on January 12, there were present Messrs. Fitch, Walker, Rogers, Boardman, Robinson and Hunter. It was especially pleasant to have Gardner Rogers on hand, as he has long been too far from Boston, New York or Chicago to attend any of the Tech doings in these centers.

McKechnie is associated with the Stoughton Process Co., with headquarters at 71 Broadway, New York City. His residence address is Sharon, Mass., where he has lived since November. Ireland is now located in the Cleveland office of M. A. Hanna & Co. Moltedo's address is 167 Leyden Street, East Boston, Mass. Bourneuf is president and manager of the B. & B. Iron Works, Inc., with a shop at 455 Medford Street, Charlestown. Bourneuf was for several years connected with the L. M. Ham & Co., Architectural Iron Works of Boston and is now engaging on his own account in a similar line of manufacture. Montgomery is one of the governors of the Technology Club of New York, is chairman of the Membership Committee, and a member of the Publicity Committee of this most enterprising organization. The annual class dinner in New York will probably be held at the Technology Club on February 9. We chronicle with pleasure the arrival at Elmhurst, L. I., on January 4, of Henry Manley third. Nash has been making an extended business trip in the far East, the following being a brief memorandum of his movements as reported from Mukden, November 18, last. Nash sailed in September and expects to return to the United States in February.

Sailed from Tsuruga just a month from date we left Vancouver. Ran into a typhoon which delayed us and brought us into Vladivostok late in evening. No hotel accommodations whatever; got one-fourth of a room with bed (no mattress, blankets or anything) and put up with that. Thousands sleeping in railroad stations, on floors, etc. Thousands of soldiers in town and disorder general; regretted many times not having arms. Spent week at Harbin; dangerous town at present, kill two or three most every day or night. Soldiers attempted to close our hotel, and it looked like a fight for a time. Went from there to Chang Chung, the junction between the Japanese and Russian railroads. All freight transferred from one car to another here because of difference in gage. Great difference in roads. Japanese lines well managed, comfortable and clean, while Russian line is congested and generally bad. Arrived here early this morning (Sunday) and after seeing Consul tomorrow will go to Seoul and from there to Darien. Plan to spend some time here, then go to Pekin, stopping at various points, then down through China to Hankow, down river from there to Shanghai, which we should reach by Christmas. Shall look over that section of country and then plan return. Will be glad to get south, as we nearly froze up in Harbin and Vladivostok.

Walter Fitch has been in Boston for the last few months assisting Monks & Johnson in the designing of the new Victory Destroyer Plant at Squantum, Mass., for the Fore River Shipbuilding Co. In addition to the plant at Squantum, where the actual ship-

building will take place, the work has involved the construction of a boiler plant at Providence and a turbine plant at Buffalo. Fitch expects to return to Framingham and resume his work with the Dennison Manufacturing Co. about the first of February. Cards have been received for the marriage of Arthur Childs to Miss Katherine Elisabeth Bell of Stockbridge, Mass. The wedding took place in the Congregational Church at Stockbridge on January 17.

1903.

M. H. CLARK, *Secretary*, 1790 Broadway, New York City, N. Y.
R. H. NUTTER, *Assistant Secretary*, Box 272, Lynn, Mass.

George C. Capelle is now in France as first lieutenant, Company C, 101st Regiment, U. S. Engineers, formerly First Corps Cadets of Boston.—Andrew Hepburn is a member of a State Cavalry Troop in Boston, and plays on the troop pony polo team.—F. A. Hill has received his commission as ensign in the United States Navy from the Naval Cadet School at the Institute.

From *The Tech* we learn that the following have also received commissions: Frank B. Jewett, major, O. R. C. Signal Corps.—R. M. Lawton, major, Engineers O. R. C.—W. S. Barker, first lieutenant, C. A. C., National Army.—A. F. Bennett, lieutenant.—C. H. Cooper, lieutenant, C. A. R. C. C. Training Course.—G. C. Danforth, captain engineers, O. R. C.—Paul Hansen, captain, in France.—A. S. Ackerman, O. R. C.

Miss Julia Pulsifer, formerly superintendent of school luncheons in the eighteen High Schools of Boston, has been appointed leader for the entire city, according to an announcement made by the Boston Woman's Committee. Miss Pulsifer is a graduate of Vassar, and has had additional training in the old School of Housekeeping at Chicago University.

We notice that W. H. Whitcomb has left teaching to go with the United States Rubber Company at New Haven, Conn.

Harry R. Low is now in charge of the Denver Mining and Milling Company at Wortman, Lake County, Colo.

Frank D. Kehew is on a six months' vacation from the Congo. It took him two and a half months to reach the United States, and if it takes the same time to get back he will really have only one month of vacation in the States. His address while here is: Care Mr. Kehew, Sr., 370 Shirley Street, Winthrop, Mass.

Address Changes.

Mellen C. M. Hatch, care Locomotive Pulverized Fuel Co., New York, N. Y.—Harry R. Low, Denver Mining & Milling Co., Wortman, Lake Co., Colo.—William E. Mitchell, Anniston Steel Company, Anniston, Ala.—Harrie B. Pulsifer, Mining Engineer & Metallurgist, Butte, Mont.—William H. Whitcomb, 164 Fairview Avenue, Naugatuck, Conn.

1904.

HENRY W. STEVENS, *Secretary*, 39 Boylston Street, Boston, Mass.

AMASA M. HOLCOMBE, *Assistant Secretary*,
610 Boatmen's Bank Building, St. Louis, Mo.

The names of eight men of the class who are in service have come to the **REVIEW**. They are:

Harry G. Chapin, 1st Lieut., Engrs. Div., Avia. Sec.—Frederick A. O'Leary, Lieut., 13th Res. B. Inf.; injured in France, 1917, now in New Brunswick Reg., Seaford, South Camp, England.—A. M. Holcombe, Capt., O. R. C.—Edw. H. Metcalf, 1st Mach. Mate, U. S. N. R.—Frederick Nickerson, 1st Lieut., Avia. Sec., U. S. Sig. Corps.—Frederick A. O'Leary, Lieut., 13th Res. B., Inf.—Nathaniel R. Potter, Capt., Ord. Corps.—Harold C. Stetson, C. A. C.

1905.

GROSVENOR D'W. MARCY, *Secretary*,
246 Summer Street, Boston, Mass.

CHARLES W. HAWKES, *Assistant Secretary*,
246 Summer Street, Boston, Mass.

The class Honor Roll blotters, which were sent to each member of the class, to the men in service, and to their wives as shown by the Ten-Year Book, were very well received. As was hoped for, they brought in a number of corrections and additions to the list of the men in the service.

Mrs. Abbott writes that Captain Fred is with the 304th Engineers at Camp Meade, Maryland.

James S. Brown writes regretfully that though he has tried twice, he could not get into the Ordnance Department, and has not heard from his application in the Quartermaster's.

Ros Davis sends the following characteristic letter:

I received your recent letter enclosing the class blotter and, to put it mildly, was surprised to find my name upon the Roll of Honor. No *Croix de Guerre* connected with this job. And I am *not* head of the school; just head of the Airplane Department. Please correct. I keep running into Tech men going through this school and, this week, W. G. de Steiguer, 1906, appeared with some officer engineers who are getting a special course here. I have been rather closely confined, ever since we started, trying to get onto the professorial game, but think I shall break away for a while and see what others are doing.

The following letter from Mrs. Robbe gives good news regarding Louis's advancement:

I am giving you below a little history concerning Louis which I know will interest all of his friends. After training camp closed, Louis had a ten-day furlough but was recalled before it had elapsed and assigned to the 30th (Gas and Flame) Engineers and made a captain adjutant. On December 24, he received his commission as major, and on Christmas morning was placed in command of the first battalion of the 30th Engineers and left soon thereafter at its head, on their long journey to "Over There." It is awfully hard to give up such a good husband and

father, but I am proud of Louis. Myself and two little ones will remain in Washington for six months, having leased a furnished house here. Louis's address is, Major Louis E. Robbe, 30th Engineers, American Expeditionary Forces, via New York.

I know Louis will be glad to hear from all his classmates.

Mrs. Lough writes:

Your letter was received this morning and I am very glad to give you any information of Mr. Longley. He is in charge of the entire water supply of the American Expeditionary Force under the Chief Engineer in General Pershing's Staff. He has recently been made a lieutenant-colonel of the 26th Engineers N. A. "over there." His address is: Lieutenant-Colonel F. F. Longley, care Chief Engineer, American Expeditionary Force, France. I wish I could give you further information, but I know very little myself and his letters tell me very little of what he is doing. He, of course, can't tell me in any way where he is or mention anything of military nature. He would be so glad to hear from you—I certainly will be glad to give you any news I have of him in the future.

The secretary heard a rumor that John Damon was a captain in the E. O. R. C., and upon writing him to either affirm or deny it, received the following letter:

Was glad to get your letter of December 5 which had to be forwarded twice to catch me. The reason I didn't give any address was because I knew I was going to leave Fort Leavenworth very soon, but had no idea where I was going. I have kept my associates in Salt Lake advised of my location and they kindly forward everything. My permanent address which may be used whenever in doubt and is near Tech so that little time is lost is—432 Main Street, Concord Junction, Mass. I'll try to keep you advised, but didn't have your address handy before and there is no time to do anything that can by any possibility be classed as not absolutely necessary. Would have been glad to be on the Honor Roll, but just now honors are entirely secondary and the main issue is all that counts so we are hard at it. I can say that I am mighty glad to be in the active service and thus far am in the line for combatant work. I want to get a crack at the d— Prussians and while I hope to come back after it is over, there is no question in my mind about it being worth the price if I don't come back. I haven't run across many '05 men in the service, but there are a lot of Tech men who trained at Fort Leavenworth scattered around the country now and a lot more training there. Just at present, I am temporarily attached to the Headquarters Company, of the 114th Engineers, but what "temporarily" means is hard to say. It may become permanent or I may get a telegram moving me out before this letter is finished. There is one very fine thing about the army service and that is, that a man never has to worry about where he is going or what he is going to do; just go and do as directed and the fact that something is supposed to be impossible doesn't count, do it just the same.

J. Wallace Taylor should be added to the list of '05 men connected with war work in civilian capacities. He is mechanical engineer at the Frankford Arsenal. Address, 1218 Allengrove Street, Frankford, Pa.

The name of Naval Constructor G. S. Radford, address Army and Navy Club, Washington, D. C., was through an error omitted from our list.

This letter from Furer is an interesting indication of the important work he has been on:

Referring to your letter of October 3, 1917, which was forwarded to me from Pearl Harbor, I can give you the following information which may be of interest for the class records: I am on duty at the Bureau of Construction and Repair, Navy Department, Washington, D. C., in charge of the Supply Division of the Bureau, and, in addition, have charge of the Submarine Chaser construction pro-

gram. I don't know whether you want to go back of my present duty for the class records. Possibly you want to cover my previous tour which was for two years at the Naval Station, Pearl Harbor, Hawaii, where I installed the machinery in the shops and had charge of the general plant equipment. While on this tour I also had charge of raising Submarine F-4. In connection with this job I designed all of the equipment and supervised the salvage work. I left Hawaii in November, 1915. Donald R. Battles is with the New York Ship and Engine Building Co., New London, Conn.

A clipping from an Indianapolis paper brings the sad news of the death of John H. Holliday, Jr., together with the news that he was a lieutenant in the Ordnance Department where he had been for two months. His death was due to pneumonia on December 23, 1917, and will be a shock to his classmates.

The editorial comment so well expresses our own feelings that we reprint it here:

The death of Lieut. John H. Holliday, Jr., brings the war still nearer home. He is among the early, if not the first of Indianapolis victims. Aside from the personal and sentimental loss, it is a tremendous sacrifice that the Government should have to give up a man so well qualified for service as Lieutenant Holliday, who is not only a graduate of our high schools, but of the Massachusetts Institute of Technology and Columbia University. Not the least of the war's ravages come through disease. Before he was able to strike a blow on foreign soil Lieutenant Holliday fell a victim to pneumonia at the Georgetown Hospital. But he none the less served and his name is written high on the city's Roll of Honor.

E. B. Snow writes from Detroit that he expects very soon to be called by Uncle Sam to go to work on the new Liberty Motor as an inspector.

The Ten-Year Book is still on the job tying '05 men together, as is shown by this somewhat delayed letter from Artie Belding, Salisbury House, London, England:

I am sending you \$1 for the *Ten-Year Book* and hope you can arrange to post me a copy by return as I shall be very much interested to receive this. Please send it to the above address. It is very hard to keep in touch with '05 as I'm a long way off and exceedingly busy doing two men's work, as my associate (Hoy, M. I. T., 1904) joined the British Army early this year before U. S. A. came in, and is now in France.

Hope things are going strong in the United States for the war, as every possible effort is surely needed. We are bending every energy to supply the British collieries with coal cutters, which they need badly to keep up their output.

The letter regarding the Technology War Service Fund has brought some interesting replies and some cash.

The following is from George Thomas, who as mentioned in the last REVIEW, gave us such an interesting account of conditions in Russia from where he recently returned:

You said it when you said that there have been lots of calls for cash. You see I have been doing my little since the start of the war in contributing time, effort, and money to the Russian cause, and although these contributions were not directly to the benefit of the United States, I feel that indirectly I have already done a lot. However, I am enclosing the card which you forwarded with a small contribution, and perhaps a little later I can divert some money now being sent to the Russian Red Cross and other funds to the Tech Fund.

I may be over in Tech Town soon after the first of the year, and I will look you up and see how things are going with you.

E. L. Hill sends in the following item:

As evidence of the fact that the mills of time *do* grind slowly (whether surely or not, I refuse to answer), would advise, for the benefit of the 1905 "Classic" News, that the writer has recently been appointed assistant to the general manager of this company and affiliated lines.

Bill Spalding writes from the Schoellkopf Aniline & Chemical Works, Inc., Buffalo:

This company has recently appointed me "Research Engineer." This is another of the fifty-seven varieties of "Engineer," and my duties are somewhat vague, but will relate to fitting out the processes evolved by our research chemists with proper chemical apparatus for factory production and to seeing that said apparatus is efficiently operated.

Paul M. Paine has left California, and is now with the Gypsy Oil Co., Tulsa, Okla.

Lloyd Buell writes from Casilla 764, Antofagasta, Chile, as follows:

Am just back in Chile from a visit to half a dozen tin mines in Bolivia, and also took a look at a silver mine where they are taking out ore worth sixty cents a pound from a vein six inches thick. I guess that is the richest mine I have seen, as I have never been mixed up in gold. The Indians in Bolivia are addicted to alcohol, not booze alcohol, and underground for midday meal all they eat is coca leaves. Coca is the plant from which cocaine is obtained. They are a poor lot and inefficient. But even at that it is hard to get enough of them to work the mines. I heard that story from every mine I visited. On the other hand, I met Italians, Austrians, Russians, Germans, Spaniards, Chileans, Peruvians, and Argentines, Canadians, English and one good American. There is strong anti-German feeling in Bolivia and the boycott, but personally I found everyone agreeable. My highest so far is 15,000 feet, and scarcely noticed it. I am getting a first-hand acquaintance with quite a bit of geography and having a bully time. Incidentally, have lots of work to do.

The following from Jules Barnd came in just as this batch of news was going to press:

I wish many times that I were back in Boston just now so that I could be in closer touch with the activity that is going on and also with the members of my class and to learn some first-hand information as to what conditions really are and what we are up against. One of these days I will have to go down to Boston and when I do, I'll look you and the rest of the boys up and have a feed and talk things over. I am glad to tell you that the marble quarry in Nevada has resumed operations, after being idle for a year, owing to lack of power. We are just finishing the construction of a 300 horse-power oil-burning engine and are generating our own electricity. We expect now to be delivering our marble down to the Pacific Coast in a few weeks. I have been digging straight ahead on my tunnel at Spanish Belt, which is now in about 800 feet. I have uncovered some fair milling ore, but still have about 350 feet to go yet to hit my high grade. One of these days soon, I am going to hit it and give a yell and have one real celebration. Maybe that's the day I will come to Boston and celebrate with you and the rest of the boys.

Mr. and Mrs. Winfred A. Taylor announced the arrival of Betty Ann and William Allyn on November 2, 1917. The secretary believes this to be the first assorted pair of twins in the class.

1906.

C. F. W. WETTERER, *Secretary*, Box 168, Tampa, Florida.
JAMES W. KIDDER, *Acting Secretary*, 50 Oliver Street, Boston, Mass.

*1906 Roll of Honor, M. I. T.**Army.*

F. G. Baldwin, Captain 323 Field Artillery. F. R. Batchelder, Supply Detachment, 401st Telegraph Battalion, Camp Devens, Ayer, Mass. H. C. Blake, Captain Engineers Officers Reserve Corps, Fort Leavenworth, Kansas. A. G. Bruce, Captain Engineers Training Camp, American University, Washington, D. C. W. I. Couper, Major, Engineers Officers Reserve Corps, Construction Quartermaster, Camp Jackson, Columbia, S. C. H. V. Fletcher, First Lieutenant Engineers Officers Reserve Corps, Fort Leavenworth, Kansas. J. N. Gladding, Captain Engineers Officers Reserve Corps. G. M. Henderson, First Lieutenant Engineers Officers Reserve Corps, American University, Washington, D. C. T. L. Hinckley, 5th Battalion, Plattsburg Training Camp. G. F. Hobson, Captain 305th Regiment of Engineers, Camp Lee, Petersburg, Va. B. R. Honeyman, Captain Engineers Officers Reserve Corps, Fort Leavenworth, Kansas. W. W. Hosmer, Jr., U. S. Expeditionary Force in France, care of Adjutant-General, Washington, D. C. J. T. Lawton, Captain E. O. R. C. General Engr. Depot, Washington, D. C. C. T. Leeds, Captain Engineers Officers Reserve Corps. P. F. Mann, Second Lieutenant 3d New York Field Artillery. E. L. Mayberry, Captain Engineers Officers Reserve Corps, Vancouver Barracks, Vancouver, Wash. Dr. J. H. Means, Captain Medical Reserve Corps, Base Hospital No. 6. C. A. Merriam, Captain Engineers Officers Reserve Corps. H. H. Nelson, Aviation Service, M. I. T. E. B. Pollister, First Lieutenant Engineers Officers Reserve Corps. G. A. Quinlan, Major 113th Regiment of Engineers. J. G. Riley, Captain Medical Sanitary Corps. J. A. Root, Captain Ordnance Officers Reserve Corps. L. H. Tripp, Captain U. S. Army, Quartermaster Corps. L. B. Webster, Captain Ordnance Inspector. W. W. White, Private, Aviation Section, Signal Corps.

Navy.

J. L. Ackerson, Naval Constructor, Washington, D. C. C. L. Anson, Inspector, Charlestown Navy Yard, Charlestown, Mass. E. P. Chase, United States Naval Reserve Force, Special Inspector and Test. N. Fallon, First Lieutenant Naval Aviation. R. D. Gatewood, Naval Constructor, League Island Navy Yard, Philadelphia, Pa. L. H. Maxfield, Lieutenant U. S. Navy, Navy Department, Washington, D. C. F. B. Thurber, Lieutenant U. S. Naval Reserve, Commander Mine Sweeping Force. P. E. Tillson,

Lieutenant U. S. Naval Reserve Force, Communication Officer, League Island Navy Yard, Philadelphia, Pa.

In Civilian Capacities.

E. C. Steinharter, M.D., with Cincinnati Base Hospital.

Necrology.

R. R. Heuter, First Lieutenant Officers Reserve Corps, was accidentally killed just previous to his departure for the First Officers Training Camp at Plattsburg.

The above Roll of Honor consists of thirty-five names, an increase of twenty-seven names since last issue, and new names are being added to the list every day. 1906 men not included upon the Roll of Honor should appreciate the honor which these thirty-five men have brought to the class by their prompt entry in some branch of the service. The Institute has already demonstrated that her part in this war is to be commensurate with her achievements in times of peace and it is gratifying to know that 1906 men will figure in Tech's war history.

The Tech for December 3 prints the following letter from Capt. Howard Blake, now at Fort Leavenworth, Kansas.

I was fortunate in having a hand in the organization of the first Pacific Coast Alumni Association, of San Francisco, though I am now a member of the Los Angeles Association. For several years I had the pleasure of acting as secretary-treasurer of the San Francisco Association.

My home is now in sunny California, but I was born and brought up in Boston, and Boston will be "back home" always. I am fortunate in possessing a wife and two future Technologists, not "Cleofans," aged four and two respectively.

This information is forwarded because I hold a commission in the Engineers Reserve Corps as captain and am at present stationed at Fort Leavenworth. Possibly this address will change in the next few days, but then, "I'm in the army now."

You of course realize the pride every Tech man takes in what the Institute and Alumni and undergraduates are doing in this great war.

The reader has probably already noticed a change in the heading which usually precedes these notes. It was with great reluctance that the compiler of class news submitted copy for the REVIEW without the name of C. F. W. Wetterer as class secretary. "Wet" moved up another peg in the Stone & Webster organization and was made the manager of the Tampa Electric Company along the latter part of the summer. He laid in a supply of Palm Beach suits, pulled up stakes in Hingham and is now located in the Sunny South where he has the laugh on us fellows with only a ton of coal in the cellar and none to be had from the dealer. Shortly after "Wet's" departure the assistant secretary received a letter from him in which he resigned as secretary of the class.

Under the admirable class constitution (written by Wetterer and Kidder) upon the resignation of the secretary the assistant secretary becomes secretary and a new assistant is elected. On the part of the assistant secretary he felt that he would have the backing of every 1906 man when he laid the resignation on the

table, so to speak, and did not take immediate action. The proposition was talked over with a number of the men around Boston and it was finally decided to defer action with the possibility of getting Charlie to reconsider. The assistant secretary wrote to Tampa to that effect and received the following reply:

I do not anticipate being in Boston within the next few months and I also want to go on record as being extremely busy. Things have been coming pretty fast lately and I really have no time for outside work, although there is some here in connection with various civic organizations that I feel obliged to give some time to. I appreciate very much your saying that the fellows would like to have me continue active in class matters and do not want to appear pig-headed, but I really feel that I must be relieved from the responsibility in this connection, at least for some little time to come. Don't you suppose that there are some of the other fellows who would be willing to take this work over for a while? I would suggest that you consider the matter along these lines, and then talk with whoever seems to be in line for helping out.

As notice came to submit class notes shortly after this reply was received the notes were submitted with the changed heading, as shown above. The idea of acting secretary was to tide over the present emergency and to relieve Wetterer of any additional duties just now. At the present time class affairs are not particularly active and the necessity for two secretaries is not great, but just as soon as things become any more strenuous you may be sure that steps will be taken to get the necessary assistance for the proper conduct of class business.

Jack Norton submits the following from Chicago:

The only '06 man I have been in touch with is F. H. Willcox, Course V. He has just moved to this town and is with the Freyn Co., Engineers and Contractors, having left the Bureau of Mines some time ago.

I am nicely fixed here and am very happy at the job. Am working under a Tech '88 man. I really have not much to say for myself at this time, for we are just getting started.

I will let you have any news that comes to my ear, you may be sure.

With Jack Norton and Charlie Wetterer missing from the '06 men around Boston, the rest of us will have to make an extra effort to keep class affairs from lagging.

It is gratifying to observe that some of the confirmed bachelors of 1906 are now getting into line. Notice the following:

Mr. and Mrs. C. F. McBride announce the marriage of their daughter Ethel, to Guy Hall Ruggles on Wednesday, October 24, 1917. At home after November 15, Humbolt, Arizona.

The following is taken from the San Francisco *Chronicle* of August 15, 1917:

The wedding of Miss Elizabeth Gray, daughter of Mr. and Mrs. John Waterman Gray of Oakland, and Knight Wheeler will take place this afternoon at the Gray home on the east side of the bay. Rev. Father James Towle of San Francisco will perform the ceremony, and only relatives of the couple will be present. After their honeymoon trip Wheeler and his bride will go down to Fresno, where the former will resume his duties at the naval recruiting station. Wheeler was with the American Aviation Corps in France for a year, returning to California last May. Miss Gray received her degree from the University of California.

The marriage is announced of W. N. (Bill) Messenger and Miss Mabel A. Burnham on September 3. "Bill" is now Division Traffic Engineer of the New England Telephone and Telegraph Company at Springfield, Mass.

1906 men should be particularly interested in this year's doings of the Tech Club at Philadelphia, as "Herb." Terrell is president of the Club. From the notices of the meeting it is evident that the Club is benefiting by his leadership. The 1918 meeting of the Technology Clubs Associated is planned for Philadelphia and with "Herb." engineering the job it should have an especial attraction for '06 men.

1907.

BRYANT NICHOLS, *Secretary*, 10 Grand View Road, Chelsea, Mass.

HAROLD S. WONSON, *Assistant Secretary*,
376 Blair Road, Washington, D. C.

That '07 is doing a fair share in the world war was shown by the blotters which every man in the class received in December, giving the names of 35 men, or 13½ per cent of the active membership of the class, who are serving in the Army or Navy. While news pertaining to military duty has a special human interest now, the facts concerning the business and family progress of our men always hold our attention and help to maintain the brotherly feeling which has always existed in our class. So we'll omit the military doings here and record what we have of the other kind.

The secretary was grieved to learn of the death of two of our classmates. John Franklin Rehn died at Ithaca, N. Y., on January 1, 1917, of pneumonia. John attended the Institute as a member of 1907 during our first two and a half years. Most of us remember him chiefly on account of his activity on the class tug-of-war team. His jolly nature and strenuous manner of doing everything he undertook made him well liked by all. During the years 1906 to 1912 John worked for several different concerns as a mill expert and concrete engineer in various parts of the country. Since that time he has been lost to the class secretary, as mail sent to all the addresses we knew about was returned. John was married on February 22, 1913, and so far as we know, his wife and a daughter survive him.

On October 13, 1917, Charles Willett Beam died at Buffalo, N. Y., after an illness of eight weeks. Beam was a graduate in Course I, also having a degree of B. A. from Amherst College. He was active in athletics while at the Institute, being a long-distance runner. In response to an inquiry from the secretary, his father writes telling of Beam's career and sickness. After graduation, he went to Watertown, N. Y., with the Maintenance of Way Department of the New York Central & Hudson River R.R. On September 6, 1911, he married Miss Cora Wilson of that place, and shortly

afterward was transferred to Jersey Shore, Pa., as assistant division engineer. While there his wife died. In May, 1917, he was transferred to Buffalo, N. Y., as assistant engineer and right-hand man to the division engineer of the Syracuse Division of the New York Central, where he had supervision of the maintenance of tracks, bridges, and other structures, as well as of their design. His death came as the result of colds contracted in the spring of 1917 which developed into a severe form of bronchitis. The sympathy of the class goes in all sincerity to the families of these men.

The New York *Evening Sun* of October 12, 1917, gives an announcement of the engagement of Rutherford Bingham, '07, son of Gen. Theodore A. Bingham, formerly police commissioner of New York City, to Miss Marguerite Shonts, daughter of Theodore P. Shonts, president of the Interborough Rapid Transit Co., and the New York Railways Co. The wedding, so far as we know, took place on November 14, 1917. Rutherford Bingham graduated in electrical engineering. After working in different lines, in February, 1911, he entered the United States diplomatic service, and served in Ecuador until 1915, when he went to Vienna as secretary at the United States Embassy. He is now a captain in the 18th Regiment of the Pennsylvania National Guard. Mailing address is care of State Department, Washington, D. C.

On October 18, 1917, the engagement of Harold P. Farrington to Miss Edith C. Aitken of New York City was announced. The wedding took place early in December. Farrington is president of the Peninsula Trading Agency, Incorporated, an importing and exporting concern, with offices at 31 Nassau Street, New York City.

Henry B. Alvord of the Aberthaw Construction Co., 27 School Street, Boston Mass., has become secretary of the American Concrete Institute.

The secretary received an interesting letter in November from Ralph Crosby. His address has changed once again, but Ralph says it won't be the last time. He is now in Ludington, Mich., with the Haskell Manufacturing Co. This concern makes three and two-ply veneer with a specially durable form of glue, for use in aircraft. This is in Ralph's line, as he has been interested in aeroplane construction and experimentation for sometime. He sends a snapshot of himself and family—a wife and *five* children! He wants to know if "any other '07-ite has five to his credit." The secretary doesn't know of any. If any exists, let him speak up.

Joseph M. Baker, whose address has been unknown for some time, is at 7157 Bennett Avenue, Chicago, Ill.

1908.

RUDOLPH B. WEILER, *Secretary,*
Care The Sharples Separator Co., West Chester, Pa.

L. T. COLLINS, *Assistant Secretary,*
Care Marshall & Co., 70 State Street, Boston, Mass.

The regular bi-monthly dinner was held at the Boston City Club December 11, with the following members present: H. L. Carter, Monroe Ames, W. D. Ford, A. W. Heath, S. F. Hatch, E. I. Wells, Myron M. Davis, Leslie B. Ellis, B. W. Cary, A. B. Appleton, E. J. Beede, L. T. Collins.

Following the plan of this season to spend some of the evenings sitting around the table rather than engaging in bowling matches, E. J. Beede and B. W. Cary furnished the entertainment for this dinner. Mr. Beede very kindly consented to give us a radiopticon talk on a three weeks' stay at the Panama Canal during an interesting part of the construction period. He had a great many pictures showing the various phases of the activities and construction work at the Canal, and they gave us a great insight into the systematic and thorough, as well as rapid manner in which the Canal was built. The lecture took about an hour and a half, and was intensely interesting.

Leslie Ellis and W. D. Ford will plan the entertainment for the next meeting.

The death of E. M. Savage, '08, on October 12, 1915, is just reported.

1909.

CHARLES R. MAIN, *Secretary,*
201 Devonshire Street, Boston, Mass.

GEORGE A. HAYNES, *Assistant Secretary,* Boston, Mass.

The class held the first of this winter's informal dinners at the Engineers' Club, Boston, on November 14, 1917, and although not largely attended, proved to be a most interesting meeting. Capt. "Art" Shaw came down from Camp Devens at Ayer, and after dinner gave us a mighty interesting talk on his experiences at Plattsburg, the American University at Washington, D. C., and at Ayer. "Art" is now a captain in the 301st Engineers. It would do us all a world of good to get some of the enthusiasm of these fellows who have gone into the service and the secretary regrets that he was unable to announce this talk when sending out notices of the meeting, so that more of the boys could have made a special effort to be present. Those of us who were there were indeed fortunate in hearing, first hand, of the experience of one of our classmates, who is doing his share in this struggle for the right.

One thing more about the bi-monthly dinners. The secretary has been sending out about one hundred return post card notices,

a few days prior to the dinners. The percentage of returns has been regrettably small. Not that the men are disinterested, probably, but because they are apt to put the card aside for a day or two; it thus remains pigeonholed unnoticed. The committee has discussed this situation and has decided that it does not seem wise to go to any useless expense and hereafter no printed notices will be sent out. The committee will endeavor to get in touch with the men, near Boston, by telephone and would greatly appreciate it if the members of the class would kindly spread the announcement of the meetings to other members of the class. In view of the fact that the Technology Alumni dinner comes on January 12, the class dinner which would ordinarily come on the 16th will be omitted. The next regular informal dinner will be held on March 13, the place to be announced later. Notice of the dinner will appear in *The Tech*.

A few days ago a circular letter was sent out relating to Technology's war service. It is hoped that this appeal may have a generous response. Apparently, the blotter scheme is working out well, for within a short time two or three additional names were reported. It is very important that all changes of address be sent in immediately, so that we may keep in touch with the boys at the front and elsewhere in service. New blotters will be printed from time to time, so please keep the secretary posted.

Almost all of the news that comes to hand these days relates to the war activities and it is inspiring to see how many of our boys are already actively engaged in the great work. To date, about fifty of the class are in the service and one has already given his life for the cause.

Roll of Honor—Class of 1909, M. I. T.

Lieut. Thomas A. Tillard, Royal Flying Corps, British Expeditionary Force, killed in France, December 6, 1916.

Capt. F. D. Applin, Coast Artillery Corps. H. P. Belknap, 301st Infantry Headquarters, Camp Devens, Ayer, Mass. Capt. Egerton M. Bettington, Royal Flying Corps, British Expeditionary Force. T. B. Black, Reserve Officers Training Camp. William P. Blodgett, Reserve Officers Training Camp. Capt. Kenneth T. Blood, Coast Artillery Corps. Lieut. J. Carlisle Bollenbocker, 75th Aero Squadron Signal Corps. Maj. Samuel Cabot, Depot Brigade, 76th Division, Camp Devens, Ayer, Mass. Maj. Clifton C. Carter, West Point, N. Y. John A. Christie, National Army. Capt. William D. Clarke, Engineer Officers Reserve Corps. Capt. Francis C. Crowley, 5th U. S. Cavalry, Fort Leavenworth, Kansas. Maj. Bradley Dewey, Sanitary Corps, Washington, D. C. Ens. Howard H. Dole, U. S. Naval Reserve. Lieut. Henry W. Dun, Jr., 21st Light Railway Engineers. Lieut. L. C. Eddy, Jr., Engineer Officers Reserve Corps. Lieut. Herbert C. Elton, Engineer Officers Reserve Corps. Lieut. W. Craig Fergu-

son, Ordnance Department (ordered to Manila, P. I.). Lieut. George H. Gray, 301st Engineers, Camp Devens, Ayer, Mass. Capt. Fred M. Green, Coast Artillery Corps. W. Duncan Green, Reserve Officers Training Camp. Lieut. Arthur E. Hartwell, 425th Depot Brigade. Lieut. Harry L. Havens, Engineer Officers Reserve Corps. Lieut. Armin F. Herold, 35th Division. Asst. Naval Const. H. S. Howard, Bureau of Construction and Repairs. Capt. Carlton D. Jacobs, 101st Engineers Headquarters, American Expeditionary Force. Sergt. H. L. Jenness, 315th Infantry, Company M. Capt. Reginald L. Jones, Signal Corps, Western Electric Company. Capt. A. C. Judd, 310th Infantry. Sergt. 1st. cl. W. C. Kerr, Signal Corps. Lieut. Christian Kurtzmann, Quartermaster Corps. Maj. Paul H. Lazenby, 2d Canadian Pioneers, Canadian Expeditionary Force. Lieut. Lynn A. Loomis, Gas Service, L. O. C., American Expeditionary Force. Lieut. D. P. Marvin, U. S. Guard Cutter *Unalaga*, Seattle, Wash. Capt. Frank S. McClintock, Coast Artillery Corps. Lieut. George T. Palmer, Sanitary Corps, Fort Oglethorpe, Ga. Capt. F. Gardiner Perry, Coast Artillery Corps. Lieut. Charles W. Radford, 34th Cav. Depot Sq., Fort Garry Horse. Capt. Rudolph W. Riefkohl, C. A. C. 3d Division, San Francisco, Cal. Lieut. A. M. Rosenblatt, 33d Engineers, Ayer, Mass. Lieut. Edward L. Ryerson, Jr., Signal Corps. Harold Schaffer, Canadian Royal Engineers. Capt. Maurice R. Scharff, American Expeditionary Force. Capt. Arthur L. Shaw, 301st Engineers, Camp Devens, Ayer, Mass. Lieut. Xanthus R. Smith, Ordnance Officers Reserve Corps. Lieut. W. B. Van Inwegan, 23d Engineers, Camp Meade, Annapolis Junction, Md. Lieut. Ernest A. Ware, 506th Serv. Battalion, Camp Meade, Annapolis Junction, Md. Lieut. W. F. Wells, Sanitary Corps. Capt. Lyman F. Whitney, Signal Corps, Chief S. O.'s Office. Lieut. P. M. Wiswall, Sanitary Corps, care Hero Mfg. Co., Philadelphia, Pa. Lieut. Frederick B. Wood. Lieut. R. H. Allen, 308th Engineers, Chillicothe, Ohio. Lieut. Walter W. King, Aviation Section, Signal Corps, Ellington Field, Houston, Tex. W. S. Gordon, Aviation Corps.

Please send any information concerning 1909 men in service to the secretary at once, so that he may send their latest addresses to the Alumni office.

In a recent number of *The Tech* appeared a clipping from the Anniston, Ala., *Evening Star*, which spoke in highest terms of the work of "Molly" Scharff (then in the employ of Morris Knowles, Engineer), in organizing and carrying out the surveys and other engineering work in connection with one of the new cantonments, Camp McClellan.

The secretary was pleased to receive a very unique card of Christmas greetings from Capt. E. M. Bettington, VI, of the Royal Flying Corps. The card was gotten out by men in the Engine Repair Shops of the R. F. C. and was produced in the field.

F. L. Hunt, VIII, and G. E. Washburn, VIII, are at the Bureau of Standards at Washington, D. C.

Last October, there was held in the Rogers Building, an exhibition of envois and studies of Kenneth E. Carpenter, IV, Fellow of the American Academy in Rome.

1910

DUDLEY CLAPP, *Secretary, Box 1275, Boston*

On December 18, 1917, there were so far as known sixty-four members of the M. I. T. T. E. N. Class in the service of the United States. Here is the list as reported:

William Clark Arkell, First Lieutenant, O. O. R. C., Supply Division Ordnance Department.—Roland Kingman Armes, First Lieutenant, O. O. R. C., at Plattsburg.—Russell Thomas Bailey, Medical Corps, Sanitary Division.—Alexander Graydon Batsner, First Lieutenant, 85th Division, I. O. R. C.—Frank Frederick Bell, First Lieutenant, Aviation Signal Corps.—Braxton Bigelow, Captain, R. B. A., 170th F. A. (Probably captured.)—Leroy E. Briggs, M. E., Ordnance, Machine Gun Branch.—Tyler W. Carlisle, Captain, O. R. C., Small Arms Division.—Maurice Scott Chapin, First Lieutenant, O. O. R. C.—Dudley Clapp, First Lieutenant, Sanitary Corps, N. A., Gas Defense Service.—Herbert Squires Cleverdon, First Lieutenant, U. S. R.—Harry Ward Cleveland, First Lieutenant, E. O. R. C.—Samson Kalmon Cohen, First Lieutenant, Engineers O. R. C., First T. C.—Alva Breaker Court, Naval Construction Lieutenant-Commander, U. S. N. (Reg.) Construction Company.—Charles Eaton Creecy, First Lieutenant, Signal O. R. C.

Frederick Archibald Dewey, Captain, Sanitary Corps, Gas Defense Service.—John Christopher Diehl, First Lieutenant, E. O. R. C.—William Noel Drew, Second Lieutenant, 2d F. A., N. A.—Andrew Laurie Fabens, First Lieutenant, O. O. R. C., Equipment Division.—Daniel Wilson Gibbs, First Lieutenant, E. O. R. C.—James Arthur Given, First Lieutenant, E. O. R. C.—Allen Adams Gould, Captain Motor Transport Section, Q. M. C., U. S. A., Motor Transport Inspections, British Ministry of Munitions of War in U. S. A.—Alfred Hague, Boatswain's Mate, First Class, U. N. R. F. Armed Neutrality Guard—Henry Appleton Hale, Jr., Captain, E. O. R. C.—Guy Nicholas Harcourt, First Lieutenant, E. O. R. C.—Henry Gordon Hawes, Jr., First Lieutenant, E. O. R. C.—Clifford Chase Hield, First Lieutenant, E. O. R. C., 337th F. A., N. A.—Robert Bell Hilliard, Lieutenant-Commander, U. S. N., Construction Corps.—Horace Sargent Hindz, Seaman, U. S. N. R. F.—William Henry Horton, Jr., O. O. R. C.—Richard Clark Jacobs, Jr., Sergeant, 14th Railway Engineers, N. A., American Expeditionary Force.—Irving Patterson Kane,

Captain, E. O. R. C., 305th Engineers.—Edward Kenway, First Lieutenant, Signal O. R. C., Aviation Section, 83d Aero Squadron.—Walter Wellington King, First Lieutenant, Signal Corps, Aviation Section, 42d Aero Squadron.—Kenneth Leavens, First Lieutenant, E. O. R. C.—Richard Wheatley Lewis, First Lieutenant, E. O. R. C., First Divisional Engineers Train, American Expeditionary Force.—Lewis Gerstle Mack, Second Lieutenant, E. O. R. C., E. O. T. C.—Augustus Bradford Merry, Company E, 301st Regulars.—William Robert Nichols, Private, Depot Brigade N. A.—John H. O'Neill has been a captain in the Sanitary Corps, N. A., since December 1, 1917. He was assigned to the Sanitary Inspection District of the South and was in charge of the sanitation of the cantonment zone (Camp Beauregard) for the State Board of Health. He is now at Camp Sheridan, Ala., and writes: "Haven't seen a '10 man since Hector was a pup. Here's hoping we can have a '10 party in Berlin some day—after we 'Kan the Kaiser.'"—William Moulton Pettingell, Private, Artillery, 103d Battery D.—Erfert Merton Potter, First Lieutenant, Engineers O. R. C., Company A., U. S. E.—Earl James Wilson Ragsdale, Captain, O. D.—Thomas Avery Roper, First Lieutenant, O. O. R. C.—John Hamilton Ruckman, Second Lieutenant, Infantry.—Lieutenant Harry A. Robertson, who was anxious to take part in the war against the Kaiser, was a member of the Canadian Expeditionary Force. He was killed in action on May 11, 1917.

Tom Wynne Saul, First Lieutenant, Engineers Corps, N. A. Ry., Company E 18th.—John Henry Scarff, Second Lieutenant, Q. M. C. N. A.—Hermann Charles Schmidt, Captain, O. R. C., Ordnance Section.—Carroll Harper Shaw, Captain, E. O. R. C.—Francis Seward Smith, Ambulance.—Walter Talbot Spalding, Captain, E. O. R. C., Arsenal Construction.—Arthur Leon Stein, N. A.—Frederick Haskell Stover, Captain, E. O. R. C., 5th Company, E. O. T. Camp.—Horace Eugene Stump, Engineer N. A. 30th Engineers Gas and Flame.—Clarence Hale Sutherland, First Lieutenant, E. O. R. C.—Philip Dunbar Terry, Captain, C. A. C.—Harry Freeman Thomson, Q. M. C., Director of Transportation (Motor) Tests.—Charles Elliott Tilton, First Lieutenant, O. O. R. C.—John Michael Townsend, First Lieutenant, Railway, 14th Engineers, Company F.—VanCourt Warren, Second Lieutenant, E. O. R. C.—Lawrence Watts, Captain, C. A. C., U. S. A., R. O. T. C.—Russell Diemer Wells, First Lieutenant, Ordnance Inspection Section, Equipment Division.—John Prescott Wentworth, First Lieutenant, Sanitary Corps.—Chester Worcester Wilson, Assistant Superintendent Navy Department.

Regarding Braxton Bigelow, noted in the above list as "probably captured," classmates who remember him know that he was a son of Major John Bigelow, U. S. A., long Professor of Military Science at Tech, and a grandson of the American diplomat, John

Bigelow. He held a commission as Captain in the 170th British Field Artillery. It is learned that about three months ago Ambassador Page reported to the State Department by cable, that Captain Bigelow could not be traced to any prison camp in Germany. He went "over the top" on the night of July 23 with eight men. After bombing several dugouts all but two of his men were either disabled or killed. With these two he entered a mine, leaving one man at the entrance, and the other, later on, at a cross section. He went on with a man he had taken prisoner. The prisoner walked ahead of him. After a while the man at the crossing heard his voice—then a shot—and followed in the direction that Bigelow had gone. He found the prisoner, who on being asked where the captain was, replied by pointing up a mine shaft. That is all any one knows and is what led his men to think he was captured. The first news that came of Captain Bigelow was simply "missing."

The wedding of Miss Beatrice Slattery, daughter of Mrs. Alberta Slattery of Newton Upper Falls, and Harold Remick, son of Mr. and Mrs. Charles Remick of Rye Beach, N. H., took place in September in Newton Upper Falls. Miss Slattery has figured prominently in the amateur theatricals of Newton. She is a graduate of Newton High School, the Greeley School of Elocution, and of the Emerson School of Expression. Remick is at present manager of the electric light department and superintendent of the water department at Littleton.

About sixty men attended a recent Cosmopolitan Club smoker, when President Maclaurin and Dean Burton addressed the men. President Alvare, '19, of the society first welcomed the visitors and explained that the purpose of the society was to promote better relations between the foreign and the American students. He discussed the prospects of the coming year and encouraged the members to work; for, he said: "All of us are proud of Tech; let us make Tech proud of us." President Maclaurin greeted the new and the old members, and spoke of the necessity of such a club at the present time. One cause of the war, he explained, was the fact that the peoples of the different countries do not understand each other. Dean Burton, who was one of the original members, recalled many of the chronicles of the Cosmopolitan Club. The society was suggested and formed by Gorton James, '10, to develop greater friendship among the students, especially those who come from foreign countries. The idea was not to debate questions of the day, but to have pleasant times together. It has had, in the nine years of its existence, between three and four hundred members. The presidents of the club have come from all quarters of the globe, only once duplicating in nationality. A few years ago, the club had a joint banquet with the Harvard Cosmopolitan Club.

G. B. Reynolds has recently been transferred to the Canadian Kodak Company, Toronto, Canada. He has been promoted to

plant engineer in charge of all power engineering and maintenance work. On October 20 he was married to Miss Gladys Chandler.

T. W. Wallour was married in September to Miss Frances Chapin of Springfield, Mass. He is with the American Telephone & Telegraph Company, New York City.

Charles E. Green and Miss Christine Evarts were married on September 22.

Kenneth Leavens, son of Mr. and Mrs. T. C. Leavens, Otis Street, Newtonville, has been commissioned as first lieutenant in the United States Engineering Corps. Leavens enlisted with the corps in Paris, August 1. For the past four years he has been in Spain on engineering work, and prior to that he was engaged in similar work in Mexico City.

War time will be dangerous for a lot of men, but for the mechanics in the Puget Sound Navy Yard, who are doing their bit in the background of the war machine, the stress and peril of a large industrial plant will be mitigated as far as possible. One of the Navy Yard's most recent additions is a safety engineer. The man who bears this interesting title is F. P. Crossley, who is especially delegated under the department of public works to see to it that all necessary safety appliances are placed on the machines of the shops. He wanders about the yard and keeps an eagle eye on possible traffic dangers.

D. W. Phelps is now in the office of the Ship Protection Committee of the Emergency Fleet Corporation.

W. T. Beidler is construction superintendent of the Baltimore Gas & Electric Co.

"Chet" Dunlap writes that whenever he sees an issue of the REVIEW he turns madly to the news of 1910. He says that he supposes everybody is busy and that as for himself, the kaleidoscope on the moving picture programme has nothing on his career for the last year and a half. For some time he received part of his salary from the brewing industry. Opportunity opened later for a change and he shifted from the manufacture of throat wash to tooth wash. His company was obliged to start manufacturing a dental cream in England and so Chet, who had recently taken a honeymoon trip to Bermuda, started in the summer of 1916 for England. On this second honeymoon trip he had some job on his hands to get together machinery, power, supplies, and other incidentals connected with the dental industry. It was the most strenuous mental exercise he ever had, not even excepting finals. He left the brewery weighing 235 pounds. He came back to the United States early last year, a tired, thin man of 170 pounds. He is successful in his work, has been promoted to an important position with the company and is apparently contented to live in New Haven, where he passes his time when away from the works in playing with a nine-months-old baby.

Dudley Clapp, the class secretary, writes from France that he

hopes all classmates will continue to send news items to Box 1275, Boston. He is in the Gas Defense Service, and in the group of officers to which he belonged, instructed by veteran soldiers from the army overseas, were five other Tech men. In the small party of Gas Defense men that was sent abroad, there was another Tech man, so that he thinks the Institute is well represented, as no other college had more than one representative. A circular has been sent to each member of the class calling attention to the need of funds for Tech's war time activities. As the secretary writes, even Tech men who are in service do not realize until they get "over there" how much Tech can and will do for its graduates who are anxious to help Uncle Sam in his stupendous work. Christmas cards and personal letters from members of the class to the secretary have been forwarded to him.

Just as the January REVIEW goes to press come several items relating to members of the class. Daniel Wilson Gibbs is now First Lieutenant, Company B, 501st Engineers, and is in service in France.—E. A. Redman is First Lieutenant, Signal O. R. C., Aviation Section, Taliaferro Field, Hicks, Texas.—Ernest O. Christiansen is with the Standard Woven Fabric Company, Walpole, Mass.—H. G. Reynolds is now located as purchasing agent for the Hood Rubber Company, Watertown, Mass.—J. K. M. Harrison received a commission as Lieutenant (junior grade) in the United States Naval Reserve Force on October 31 and was attached to the Ordnance Bureau. He is stationed in Boston as Naval Inspector of Ordnance.

Secretary Clapp writes that "somewhere in France" he has run across Tom Saul of the Engineer Corps, whom he has not seen since they were in Tech together.

1911.

ORVILLE B. DENISON, *Secretary*,
63 Sidney Street, Cambridge A, Mass.

HERBERT FRYER, *Assistant Secretary*,
140 N. Broad Street, Philadelphia, Pa.

1911 Honor Roll.

Name	Course	Rank	Service
H. S. Alexander	II	Lieut.	Avia. Sec., S. O. R. C.
J. F. Alter	IV	Inspector	Q. M. C.
J. T. Arms	IV	2 Q. M.	Nav. Res.
Joseph A. Aaron	VI	Priv.	Co. N, 5th Batt., 163 Dep. Brig.
H. E. Babbitt	XI	Capt.	E. O. R. C., Co. 7
F. R. Bailey	I	Lieut.	301 Eng.
D. C. Bakewell	II	Lieut.	O. D., U. S. R.
Stanley E. Bates	I	Priv.	N. R.
E. E. Bosc	II	Lieut.	O. O. R. C.
H. C. Brown	II	?	Eng. N. C. S., C. A. C.
Paul Burdett	II	?	O. R. C., C. A. C.
P. L. Caldwell	I	Lieut.	Avia. Sec., S. O. R. C.
William H. Coburn	I, XI	Lieut.	Gas Def., San. Corps, U. S. A.
H. W. Churchill	VI	Lieut.	O. D., U. S. R.
M. M. Cory	I	?	Seen in uniform at Camp Devens

Name	Course	Rank	Service
R. W. Cushing	VI	Capt.	E. O. T. C.
H. C. Davis, Jr.	VI	Capt.	O. D., C. A. C., U. S. A.
W. C. Davis, Jr.	I	Corp.	319 Inf.
J. J. Devlin	III	Lieut.	301 Eng.
Whitford Drake	XIII	Lt. Com.	U. S. N.
C. Edwards, Jr.	XIII	Lieut.	307 F. A., Batt. D.
W. D. Foster	IV	Sergt.	Camfl. Corp., 24 Eng.
Russell D. Francis	III	Corp.	101 Eng., A. E. F.
Stafford A. Francis	IV	Corp.	C., 339 Inf., Camp Custer, Mich.
J. N. French	IV	?	Aviation
D. P. Gaillard	VI	Lieut.	O. D., U. S. R.
G. C. George	I	Lieut.	E. O. T. C.
R. H. Gould	XI	Cadet	Avia. Sec., Sig. Corps
Louis Grandgent	IV	Capt.	101 Inf., A. E. F.
J. S. Gravely	V	Capt.	O. O. R. C.
H. W. Hall	IV	Capt.	Co. D, 348 Inf., Camp Grant, Ill.
R. T. Hanson	XIII	Lt. Com.	Const. Corps, U. S. N.
L. J. Harrigan	XI	?	N. R., A. E. F.
J. A. Herlihy	II	Lieut.	S. O. R. C., 109 Squad.
W. F. Herrick	II	Lieut.	Army Avia., Det. 5
C. F. Hobson	X	Lieut.	Def. Res., N. G.
W. K. Hodgman, Jr.	II	Lieut.	O. O. R. C.
F. C. Jewett	I	Q. M.	10th Deck Div.
R. L. Jones	VI	Capt.	E. O. R. C.
C. R. Johnson	X	Capt.	Gas Def., San. Corps, U. S. A.
George C. Kenney	I	Lieut.	Avia. Sec., S. O. R. C.
Edw. Kenway	I	Capt.	64th Aero Squad.
C. P. Kerr	II	Lieut.	Avia. Sec., S. O. R. C.
M. C. Kinney	IV	?	R. F. C.
H. P. Letton	XI	Capt.	E. O. R. C.
R. W. Lewis	V	?	E. O. R. C.
H. S. Lord	II	Lieut.	E. O. R. C.
R. H. Lord	VI	Lieut.	O. D., U. S. R.
J. L. McAllen	III	Lieut.	E. O. R. C.
J. D. MacKenzie	III	?	Can. Inf.
C. B. Magrath	II	Capt.	Can. Inf., Wounded Oct. 22
H. L. Manley	I	Lieut.	O. O. R. C., 35th Div.
I. F. Morrison	VI	Lieut.	O. O. R. C.
Robert E. Morse	VI	Priv.	321st Field Sig. Brn.
J. B. Nealey	I	Priv.	N. A.
George T. Palmer	VII	?	M. O. T. C.
T. B. Parker	I	Lieut.	E. O. R. C.
L. A. Patrick	IV	Sergt.	Mach. Gun Co. A, 102
L. W. Perrin	I, II	Capt.	301 Inf.
Oliver D. Powell	XI	Priv.	309th F. A., N. A., Batt. F.
I. R. Pry	XII	Priv.	Co. B, 1st U. S. Pioneers
R. H. Ranger	VIII	Priv.	F. A., U. S. R., A. E. F.
Carl G. Richmond	I, II	Lieut.	E. O. R. C.
Percy A. Rideout	I	Sergt.	101 Eng., A. E. F.
S. H. Scribner	I	Sergt.	R. R. Corps, 14th Eng.
O. H. Shenstone	I	Priv.	Overseas Train. Co.
W. L. Smith	IV	Lieut.	H. A.
H. R. Snyder	IV	P. A.	Paymaster, U. S. N.
S. P. Spalding	III	Capt.	O. D., C. A. C., U. S. A.
W. Y. Stamps	I	Lieut.	307 Eng.
C. H. Sutherland	I	Lieut.	8th Eng. Train.
A. F. Underhill, Jr.	VI	Lieut.	F. A., O. R. C.
Ralph E. Vining	III	?	303 Eng., N. A., Hdqtrs. Co.
R. T. Walker	IV	?	Camfl. Corps
A. K. Wardwell	I	?	N. R., 3d Nav. Div.
Lawrence Watts	I	Lieut.	C. A. C., U. S. A.
L. B. Weeks	VI	Lieut.	C. A. C., Mine Planter
Roland B. Wells	II	?	U. S. Marines
Russell D. Wells	II, VI	Lieut.	O. O. R. C.
E. J. Whitcomb	X	Lieut.	O. O. R. C.
C. S. Williams	II	Capt.	Inf.
H. D. Williams	XI	?	Eng. Corps, U. S. R.
I. W. Wilson	XIV	Lieut.	N. A., San. Corps
R. O. Wood	VIII	?	Nav. Avia.
J. C. Woodruff	X	Capt.	San. Corps, Gas Def.
A. W. Yereance	I	?	E. O. R. C.

86 — Stars, count 'em — 86

Since there have been a number of changes in the original 1911 service list, dated October 15, 1917, and published in the November REVIEW, in view of the large number of additions your secre-

tary has deemed it advisable to revise and present the up-to-date list here in full. Following the lead of the Alumni Association your secretary is including in the service list *only* those men who are in active service, endeavoring, however, in the news portion of the notes to tell of the further activities of classmates in direct assistance to the Government or closely allied thereto, even though not in active military or naval service. A card catalogue is being kept by the secretary of the 1911 war activities and he cannot too strongly urge upon his classmates the importance and necessity of *each* to consider himself or herself a committee of one to assist the secretary in keeping this card catalogue correct and up to date. If you still have the blotter sent to you under date of December 5, just read the requests in the lower right-hand corner again and then—**WRITE TO DENNIE!**—Under date of November 5, Capt. H. E. Babbitt, XI, wrote as follows:

Your *Billy Doux* has brought forth a few lines which may be of interest to the class. I am in the military service of the United States as Captain of Engineers, U.S.R. My summer was spent in training—partly at Fort Sheridan and partly at Fort Leavenworth. At the end of the first training camp I was ordered to the second camp at Fort Sheridan as an instructor. It was my expectation to finish the camp, but on November 2 orders came to proceed to Hoboken without delay for extended field service. I am en route to that destination now. Where my final destination is or what I am to do is decidedly uncertain. I don't know where I'm going, but I'm on my way!

Let's hear from you again, Harold.—Roland B. Wells, II, VI, joined the Marines three years ago and, according to his mother, is at present “somewhere in France.” Through an oversight on the part of the secretary his name was omitted from the service list on the blotters, for which the secretary herewith apologizes.—Here is a splendid letter from Sergt. S. H. Scribner, I, who is “over there” with the 14th Engineers:

This is Sunday afternoon and not very busy, so I will catch up on some of my correspondence. We have just changed our camp after many wanderings, and I am in hopes that we may settle down here for the winter, but hardly expect it. We are about two miles behind the lines, and are at work. I am certainly enjoying myself so far. A few weeks ago a couple of other sergeants of our company and myself got permission to go up to the front with one of the sergeants in a neighboring camp, and went through about a mile of trenches on this front. It was certainly an interesting experience for us. We were shown the remains of the old German trenches, which were built in a most durable way, which show that they had the best intention of living there for years if necessary.

About a mile of our trip was along the first line trench, from which we could look over and see Fritz's trench. Things were very quiet that day, as you may imagine from the fact that I went at all; but all the time the artillery was keeping up a desultory firing over our heads, so that I know what a shell in motion sounds like. Our work now takes us through towns—or rather what were towns—which are under daily shell fire, so that I have learned to duck, and when everything is all right. When you hear a “boom-sizz-z-z,” it is going the other way; but when you hear a “sizz-z-z,” it is coming your way, and something is liable to happen in your neighborhood.

We have a mighty pleasant camp, and are very pleasantly situated. Three of us sergeants are together in a hut built of corrugated steel sheets in semicircular form, and about fifty feet long. One-half of this we plan to use as an office and the

other as sleeping quarters. You should see the desk I have constructed of odds and ends of timber; also, we have rustled up an old stove, which feels pretty good mornings. Every one is busy today building brick sidewalks and cleaning up the grounds, for these things are very desirable when it rains. The only disadvantage of our position is that when the German airplanes are scouting around shrapnel and pieces of shell from the Allied guns are likely to land in our midst. This has happened in the last two days.

Even after all that has been published, you can't imagine the state of this country. In our immediate vicinity all the villages are leveled, most of the trees are down, and wherever you go you will find the fields honeycombed with lines of old trenches, some with elaborate concrete observing posts, now destroyed. In one field which I crossed I don't think there was a 10-foot square which did not have a shell hole in it. Many of these holes and trenches are already grown over with grass and studded with red poppies, making quite a contrast with their original uses. There are many partridges around, and it seems funny to see officers out gunning, and at the same time hear shells bursting not a mile away.

We get very little news from the United States, but I suppose things are moving there. I would be interested to hear whether any of the Lowell fellows I know were drafted.

There's a ripping, fine letter, with food for thought for a lot of us.—A letter came from J. B. Nealey, I, last month from Camp Lewis, Washington, which contained the following:

Have been out West ever since leaving school and am now a drafted man in the army. Am looking forward with keenness to our work in the trenches. Best of wishes to all the boys.

More power to you, J. B., and don't forget to write again.—In response to the question, "Are you flying yet?" Bob Wood, VIII, replied in a note, dated December 4th: "Only as passenger so far, Dennie. Didn't swallow my teeth, either." Databoybob!—Most of you doubtless noticed the name of Stacy Bates, II, on the service blotters as a private in the draft army. In this connection the following note from Stacy is self-explanatory:

Yours of 12/10, enclosing service blotter upon which I find my name enrolled, apparently calls for a reply upon my part. I noticed in *The Tech* of a few days ago my name as a member of the army. This is an error and judging by developments, I should have hastened to call attention to it, since I have no desire to take unto myself any undue glory. The only explanation I can offer is that the notice refers to Stanley E. Bates [I] and that the confusion has arisen because of the similarity of the initials. I was called on the first draft and exempted by the district board some time ago, but my name may yet be added to the list.

I enclose check . . . toward the support of T. W. A. and shall probably add to it from time to time, though I must admit that cash is none too free these days. Though I realize it is contrary to popular opinion, most of the tremendous profits the farmer is making at the present time exist mainly in the newspapers.

Due correction has been made in the list at the head of these notes and the Alumni office has been duly notified.—O. H. Shennstone, I, wrote on the 9th from Toronto that he expects to go overseas as equipment officer in the Flying Corps.—In the November notes the secretary announced that news had reached him of the reported marriage of Capt. R. L. Jones, VI, with details lacking. The following clipping, however, confirms the news and supplies the missing details:

Captain Reginald Lamont Jones of the Signal Officers Reserve Corps, U. S. A.,

son of Mr. and Mrs. Albert S. Jones of Los Angeles, Cal., and Miss Marion Elizabeth Babcock, daughter of Mr. and Mrs. Alfred Jerome Babcock of 318 West Seventy-Ninth Street, New York, were married on Tuesday evening in the Broadway Tabernacle in that city. Captain Jones was graduated from the Massachusetts Institute of Technology in 1911, and is in the engineering laboratories of the Western Electric Company. Mrs. Jones was graduated from the University of Chicago, class of '14.

Classmates will be pleased to learn of the birth of a daughter to Mr. and Mrs. Fred Harold Daniels of Worcester on November 16.—While in Worcester in the course of these notes, it is most fitting that the following clipping from the Worcester *Telegram* of December 9 should be chronicled:

Worcester merit has been recognized once more in the appointment of James F. Duffy to the position of assistant production manager of the Curtis Aeroplane Co. of Buffalo.

Mr. Duffy is assistant superintendent of the Reed-Prentice Co., and his resignation is to take effect Saturday. He will assume his new duties December 27 and in so doing will become an important cog in the great war machine that Uncle Sam is constructing to make the world safe for democracy.

Although Mr. Duffy is not a product of Worcester's educational institutions, he has received all his experience in big business in Worcester. Graduating from the Massachusetts Institute of Technology in 1911, he came to Worcester to engage in special investigation work at the electrical cable plant of the American Steel & Wire Co.

He was later advanced to the staff of the south works, as fuel engineer, under John F. Tinsley.

He joined the Reed-Prentice Co. three years ago, where he was assistant superintendent of the Prentice department.

Mr. Duffy is a member of Worcester Lodge, B. P. O. E., and an officer and active member of Alhambra Council, K. of C.

The Curtis Aeroplane Co. is the largest manufacturing plant of aeroplanes in the United States. It employs more than 7000 men in the five plants at Buffalo and expects to have more than 22,000 employed when its new mammoth plant is completed in January.

It was awarded, recently, a large part of the \$640,000,000 appropriation of the United States Government and is at present producing \$3,000,000 worth of aeroplanes a month.

With the resignation of Mr. Duffy, the Reed-Prentice Co. officials agree that the company loses one of its most valued employees. He enjoys the friendship and respect of the workers as well as the officials.

May all good fortune come your way, Jim! But don't forget occasional poetry.

R. E. Anderson, III, whose entrance into the ranks of the benedicts was heralded in the last issue of the notes, is president of the Laurence & Anderson Co., 307 Broadway, Cincinnati, Ohio.—Robert R. Stanley, II, is connected with the office of Bureau of Labor, Concord, N. H., and may be reached at the State House there.—E. L. Woodward, '11, VI, has accepted a position on the Editorial Staff of the *Railway Age Gazette*, New York City, Woolworth Building.—H. B. C. Allison was reported in service, but in a recent letter to the secretary states that he is still in research work with the General Electric.—T. Polhemus, XI, who is at the Long Horn Mine, Benton, Wis., has recently been admitted to the American Institute of Mining Engineers.—

Horace S. Waite, II, is a member of the firm of Campbell, Gifford and Waite, consulting engineers, 17 Victoria Street, London, S. W., England. His home address is 72 Cadogan Place, London, S. W. His firm is constructing munition works in England, France and Russia.—R. G. Adams, II, is an instructor at Tech in the Testing Materials Laboratory.—L. L. Wetmore, IV, wrote in from a job in response to the last class dues that things were breaking nicely for him and that he hoped they were for the big majority of '11-ers. He is the head of a fine family of four, comprising the lucky four: husband, wife, son and daughter. May the good fortune continue, Wetmore!—Bill Warner, I, is busy in the oil business out in Nowata, Okla., his company being now known as the Warner-Caldwell Oil Co.—The following names are found in the faculty of Northeastern College Evening School of Engineering: Carl S. Ell, XI, structural engineering; N. Sidney Marston, VI, electrical engineering; and C. P. Eldred, VI, ex-1911, electrical engineering.—Here is a pithy response to the recent request for this season's dues from R. E. Zimmerman, IX, who is assistant director of the research laboratory of the American Sheet and Tin Plate Company in Pittsburgh:

I am glad to have the opportunity of putting the family name in right by sending you a check for the annual dues, 1917-18. It is a hard proposition with one boob in the German Foreign Office, and Heinie pulling a prize bone here in America, but I believe the dollar will put me straight. This has been a busy place, as our Director, another Tech man [Bradley Dewey, '09], has gone to work for Uncle Sam as a Major, while the rest of us here are trying to help meet the urgent cry for steel and tin plate.

That'll be all right, Zim!—Harry Waterfall, II, is now in Calcutta, India, in the interests of the Angus Jute Co., Ltd., where he expects to be for five years, unless something unforeseen necessitates his return in the meantime. In this country the Angus Jute Co. is the Bemis Bros. Bag Co., A. Farwell Bemis, '93, president. As noted in the November list of addresses, he wants his mail sent to 53 Fairbanks Street, Brighton, Mass., to be forwarded.—S. H. Lawton, X, writes:

I note your query, "What's the news?" and hasten to reply, "None!" This is my fifth year in Wilmington, Del., during the last three years of which I have been working for the duPont Company. Although I can't get into Walter Humphreys' honor list of warriors, at the same time I feel that the ranks of slackers will hesitate to admit us chemists here of such obviously explosive natures. As to classmates, with the exception of Symmes, my old crony and thesis mate on the roof of Walker building, I haven't seen any for ages. Symmes has recently moved here from Utah with wife, child and auto, and is apparently so blamed busy that I see little of him. Perhaps I'm busy myself, who knows?

Whatdyemean "Obviously explosive natures," Stan?—Here's an interesting note from Royal M. Barton, VI, who is with the Reading Transit & Light Co. in Reading, Pa.:

Yours truly came up bright and early in the first call for drafted men, but failed to pass the physical exam—eyes poor. Think I could pot a few Germans at that if they would let me keep my glasses on. One day last summer I met E. W. Goodwin,

'11, in New York City. He was just leaving an aircraft company that had failed. The sarcastic comment of European observers about the quality of our machines is endorsed by Goodwin. We hope things are improving rapidly. Although I am not directly connected with any war work, the electric companies with which I am associated supply large amounts of current to iron and steel mills and engineering works that are busy on Government orders. We now have many electric steel furnaces connected to our lines in Lebanon, Reading and Easton, Pa. Besides being assistant to our superintendent of Underground, I am consulting engineer on power sales engineering, power rate investigation, whip for the construction crowd when material is delayed either at the factories or on the road, and a few other things. Technical men are rather scarce among peaceable pursuits and the tight money market is hard on non-warlike business. Maybe we shall all have to get in the war game soon.

Such letters the secretary indeed welcomes. Why don't **YOU** write?—Carl Richmond, I, II, writes under date of November 9:

Have just taken the oath in the Engineers O. R. C. as a first lieutenant and shall probably soon be called. I dislike to leave Revere, where everything is going so fine but perhaps it is just as well as to wait until I am no longer wanted. It seems likely that I will not be called out for a month or so.

Had a note from C. S. Anderson, VI, in November. Andy said he was still very busy with the Clark Electric Power Co., in Tooele, Utah, for "they require lots of 'juice' to get out metal hard enough to crack Boches' heads."—M. E. Comstock, another VI man, wrote in November:

Jim Duffy's poem was appreciated by both my wife and myself, and I didn't realize 1911 had such a literary genius.

We have lots of work here at the G. E. Co., a good proportion of it being built for use by the Government. Motors for uses of various kinds on battleships figure largely in our output.

After a year and a half of married life, I can truly say that it has more than doubled my enjoyment of life. Our first real disappointment came this last spring, when we lost a nine-pound boy at birth. But we are hoping for better luck next time.

"Bog," meaning as you all know S. Bogdasarian, IV, has once again come through with one of his customary fine letters, this time writing as follows:

August 13 (note the date) I was called back to Boston to take the physical exam for the draft. I was rejected on account of my eyes. With my glasses on I can see a Hun a mile away, but I could not "slip anything like that over" on the Board. As a matter of fact, we all feel their (Huns') presences 2000 miles away. There was nothing else to do but return to New Castle—after paying a short visit at home of six hours. I am still with the Carnegie Steel Co. and enjoy my work. Since I have been here, I have received two 10 per cent raises. These extras certainly do come in handy to turn over to the various relief funds which seem to arise every day. They are of worthy cause and one feels it a privilege to do his wee "bit" by contributing. These are truly great and solemn days with sadness in store for us as our boys over across do their "bit." It takes a powerful nation—strong in courage, duty, honor, humanity, patriotism and religion, to weather this great storm of Kaiserism. We have the "stuff" in our country along with our Allies to do it, for right always triumphs over might.

Fine work, Bog.—S. L. Hayes, V., writes from West Point, Ga., that he is "too busy dyeing and bleaching goods for the Government to send any news."—Back in the middle of November, just

after the first appeal for funds for Tech War Activities was launched, the following welcome letter was received from J. O. Greenan, III, who is with the Olympic Mines Co., Omco, Nev.

You who have been able to keep in active touch with Tech affairs are to be congratulated on the part the Institute is taking, with regard to the war. I am sending today to Mr. Humphreys my first monthly contribution to the Tech War Fund, and only wish it were more. Personally, all that I seem able to do is to contribute, as far as I can, to the production of gold, as I was turned down by the Headquarters of the Western Division, both as regards enlisting and joining the R. O. T. C., on account of a broken arm, which is permanently stiff. Give my regards to the boys, and if you know any husky undergraduates or recent graduates in Course III, who want practical experience underground, or in a 100-ton cyanide plant, you might refer them to me.

Your heart's in the right place, J. O.!—H. W. Van Hovenberg, XI, sanitary engineer for the St. Louis Southwestern Railway Co. of Texas, writes that he is "trying to increase the efficiency of some fifteen thousand employees of the railway through health protection work, more particularly the elimination of malaria."—Johnnie Wilds, II, writes in from the Windy City that he is "busy as the devil watching and designing fire protection for large plants, especially those working for Uncle Sam."—H. L. Robinson, I, writes from Worcester, where he is with Crompton & Knowles Loom Works, as follows:

Everything is going smoothly as possible under the conditions. I am sorry I cannot claim a commission in the army or be writing from "over there," in fact, all the "bit" I am doing aside from Liberty Bonds, Red Cross, Y. M. C. A., etc., is to endeavor to supply men to build looms for making government cloth. This is pretty far fetched and the only plea I can offer in excuse is that of a wife and two small children to feed, which is some problem these days. Of course, I have to clothe them, too.

Stay with 'em, Robbie!—"Fat" Merrill, I, has joined forces with the new American International Shipbuilding Corporation in Philadelphia, and is thus a component part in the great company formed by Stone & Webster to help build the new Merchant Marine. Other '11-ers with the same company, as previously announced, are Bert Fryer and Gussie Barker, both VI. Some team!—Bob Morse, VI, is at this writing at Camp Upton, N. Y., which he describes as the "coldest spot this side of Ayer." He hopes to get into the training camp for signal officers which starts in January. He wants mail sent to his Brookline home: 157 Walnut Street.—"Selly" Seligman, III, has just returned from an extensive trip to China in the interest of Hartmann Bros., wool merchants of Boston. No details of the trip have reached the secretary yet.—Ken Faunce, VI, as noted in the last issue, left a few months ago on a transcontinental trip in the interests of John C. Paige & Co. of Boston.—J. P. Hart, VI, Ensign, U. S. N. (Retd.) is teaching at the Electrical School, Navy Yard, New York.—Now for the address changes to close this original set of notes. Watch for the *POSTSCRIPT*!

Address Changes.

R. Y. Althouse, 4815 Hutchinson Street, Chicago, Ill.—Joseph A. Aaron, 1877 Newton Street, Washington, D. C.—N. B. C. Allison, 11½ Phoenix Avenue, Schenectady, N. Y.—Capt. Harold E. Babbitt, 32 Hall Avenue, West Somerville, Mass.—Ernest J. Batty, 3180 Pawtucket Avenue, Riverside, R. I.—Lewis L. Baxter, 1606-A Belcourt Street, Nashville, Tenn.—G. Arthur Brown, 640 Pine Street, Manchester, N. H.—Orliff H. Chase, Du Pont Fabrikoid Co., Fairfield, Conn.—Oberlin S. Clark, 44 Jackson Street, Pawtucket, R. I.—F. G. Cooke, Hotel Phoenix, Bath, Me.—S. B. Copeland, 21 First Street, Bangor, Me.—A. V. de Forest, Stratford, Conn.—M. S. Dennett, 80 Washington Boulevard, Detroit, Mich.—H. F. Dolliver, 41 Salcombe Street, Dorchester, Mass.—J. Howard Dunlap, Goodyear Tire & Rubber Co., Akron, Ohio.—Corp. Stafford A. Francis, Co. C, 339 Inf., Camp Custer, Battle Creek, Mich.—Lieut. D. P. Gaillard, 2230 California Street, Washington, D. C.—James O. Greenan, Olympic Mines Co., Omco, Nev.—Kenneth Greenleaf, 452 Taylor Avenue, Detroit, Mich.—E. R. Hall, 7 Gould Street, Wollaston, Mass.—Lieut. H. W. Hall, Co. D, 343d Inf., Camp Grant, Rockford, Ill.—Louis J. Harrigan, 20 Rantoul Street, Beverly, Mass.—F. C. Harrington, Puritan River, Ordnance Depot, Metuchen, N. J.—J. P. Hart, Electrical School, Navy Yard, New York.—Paul Kellogg, 143 Huntington Avenue, Buffalo, N. Y.—Edward Kennedy, 30 Charles River Road, care A. D. Little, Inc., Cambridge, Mass.—Karl B. Kilborn, 315 Oakland Drive, Akron, Ohio.—Sayre Merrill, Amer. Int. Ship Corp., 140 N. Broad Street, Philadelphia, Pa.—A. C. Metz, Eagle Pass, Tex.—I. F. Morrison, 140 School Street, Braintree, Mass.—C. R. Perry, 1538 Womrash Street, Frankford, Philadelphia, Pa.—Armand H. Peycke, McCormick Building, American Steel Foundries, Chicago, Ill.—Webster Richardson, 521 Post Street, San Francisco, Cal.—P. A. Rideout, 2 Winthrop Street, Concord Junction, Mass.—H. L. Robinson, 19 Hartshorne Avenue, Worcester, Mass.—Raymond V. Roche, 9 Friend Street, Adams, Mass.—James C. Rogers, Starkville, Miss.—Ralph E. Runels, 4 Harland Avenue, Lowell, Mass.—W. C. Salisbury, Globe Auto Sprinkler Co., 214 Loan and Trust Building, Minneapolis, Minn.—Otto R. Schurig, 233 Union Street, Schenectady, N. Y.—Osborne H. Shenstone, 398 Brunswick Avenue, Toronto, Ontario, Canada.—Henry R. Snyder, Carvel Hall, Annapolis, Md.—Robert R. Stanley, Bureau of Labor, State House, Concord, N. H.—H. W. Van Hovenberg, Tyler, Tex.—L. L. Wetmore, 94 Fletcher Street, Roslindale, Mass.—E. L. Woodward, Railway Age Gazette, Woolworth Building, New York City, N. Y.

POSTSCRIPT.

With the addition of fifteen names to the 1911 Honor Roll between December 15 and January 15, the list has risen to eighty-

six in mid-January. It's going to keep your secretary busy, apparently, keeping this list up to date, but that is what he is attempting to do, with the aid of his classmates. The secretary received a fine letter from Joe Aaron, VI, just before Christmas, written from Camp Dodge, Ia., in which he said:

I am now a private in the Enlisted Ordnance Corps and expect to do accounting. I was enlisted at Washington and sent to Rock Island Arsenal. I stayed there overnight and was sent to Camp Dodge. There are rumors that we are going to one of several places. One thing I am sure of is that when the word is given we will go to France and we cannot go too quickly for me.

I had a hard time getting in. First, my department wouldn't give me permission to enlist because they thought the war department would let them enlist men to stay in Washington. After I got the necessary permission I was thrown down because of my eyes and had trouble getting the necessary waiver on the eye test. I finally succeeded and landed out here.

This is some place. They need only 40,000 loaves of bread to feed the bunch. There are about 500 Ordnance men out here at present, and we have our own quarters. With few exceptions they are a great bunch of boys, as good as any I ever met. The meals are as good as could be expected and the officers are all fine fellows. If you could see the bunch out here you would think that the boys of 1917 will compare favorably with those of '61, etc.

Good for you, Joe!—Bill Hodgman, II, wrote in on New Year's Eve that the notification of the 1911 dinner on the 28th had just reached him, as he was now at this same Camp Dodge, Ia. He has advanced from a sergeant in the artillery at Fort Banks, Mass., to a lieutenancy in the Ordnance Officers Reserve Corps. He is attached to the Ordnance Base Depot at Camp Dodge and expects to be there two or three months. Make this correction, boys, so your blotters are up to date!—Oliver D. Powell, XI, was another classmate to write to the secretary just before Christmas. He is at Camp Dix, N. J., with Battery F of the 309th Heavy F. A., and writes:

I have been here since September 30. We are to be equipped with 6-inch howitzers, Schneider type, throwing a projectile of about 120 pounds, with a range of 9000 yards. Thus far we haven't seen any of these big guns, but we all wish they would put in an early appearance, as we are tired of the everlasting foot drill.

Previous to coming here, I put in two months at the Syracuse Expansion Camp as an Army Y. M. C. A. secretary; especially working among the artillery men. When I came here I expressed a preference for the artillery branch of the service and here I hope to remain.

I have seen Ralph Vining here several times; he is in the headquarters company of the 303d Engineers. Following Thanksgiving I spent the week-end in Philadelphia, where I met Grossmann, who came up from Washington. We had a very pleasant reunion.

A case of measles developed in our barracks yesterday and, therefore, we are quarantined for two weeks and cannot get away over the holidays. I say that is tough luck, at least.

Another welcome letter!—Capt. Harry P. Letton, XI, wrote on New Year's Eve that he is now attached for temporary duty with the 111th Engineers at Camp Bowie, Fort Worth, Tex.—The secretary learned just before Christmas from Mrs. Corabelle G. Francis of Newton, Mass., that her son, Russell D. Francis, III,

is in France with the 101st Engineers, as corporal in Company E. He received a "first-class certificate" from Wentworth Institute for a course of training there last summer.—While the secretary is mentioning so many things with the reference "just before Christmas," it may interest his classmates to read the following:

BORN—On December 23, 1917, in Belmont, Massachusetts, to Mr. and Mrs. Orville Boardman Denison, a son, Orville Boardman Denison, Jr., weight seven and one-half pounds.

Yes, both son and mother are doing finely, thank you!—Here is a mighty fine letter written from "over there" just before Christmas by our old friend, Lieut. Dick Ranger, VIII:

Mighty glad to hear from you, and best regards to your wife, and three cheers for New Year's! "Career" seems to fit the life over here. It all seems so concentrated and so different. It's a different world altogether from our normal ideas and ambitions. But it is all a part of the great cause to make the normal possible.

It has been cold, it has been muddy, but while it's here and there, with something doing every minute, our chief concern is to put our job across. And, believe me, that is some job. Poor facilities, lack of experience, and up against hardened and trained experts. The big test will come in the spring, of course, and in the meantime we are doing our best.

Technology is surely on the map over here, but there are not so many Tech men in the Field Artillery. Lansingh and Allen are doing excellent work with the Technology Bureau in Paris. They keep in touch with us all around and give us a royal welcome whenever we get a chance to experience a little real civilization, by going to Paris. I haven't been able to hit one of the monthly Tech dinners, but I'm still hoping.

Remember me to all — this new life seems all like a dream, and when I think of you it seems but yesterday. And I hope we will wake up soon!

On that basis, Dick, we all want Rip Van Winkle to come down at once from the hills!—The secretary had a fine letter a few days ago from A. W. Yereance, I, who was home from Camp Lee, Va., where he is second lieutenant in Company F of the 305th Engineers, on sick leave, having contracted measles, and after measles, the mumps. Some combination! He writes:

The class seems to be doing nobly. More power to the bunch! The only '11-ers I can give you any dope on are Stamper, whose rank is first lieutenant with the 307th Engineers, and R. W. Lewis, who went abroad with the 1st Regiment of Engineers (Regulars) as first lieutenant. He was recently recommended by General Pershing for a captaincy, so undoubtedly is sporting two bars where only one was before.

The only dope on myself is the fact, which you may not have seen, that about Thanksgiving time Mr. and Mrs. Arthur M. Seitz of South Orange, N. J., announced the engagement of their daughter, Alice Edna, to your swelled-face friend. After that I had to blow myself to a new barracks cap; the old one wouldn't stay put!

Good for you, Alec!—In anticipation of the men who might be home for the holidays the secretary arranged a class dinner for Friday evening, December 28, in the grill room of the Walker Memorial. The following men attended: Bogdasarian, Buckley, Cooley, Coupal, Cumings, Paul Cushman, Denison, Dolliver, Hall, Hallett, Jenks, Kaufman, Leary, Linehan, Pead, Richmond, Seligman, Don Stevens, Stewart, Van Tassel and Whitcomb. The

secretary informed his classmates that in keeping with the times a simple dinner had been arranged, with no stated speakers, but rather an informal discussion of the war activities of the class and the individual activities of the men present. Lieutenant Richmond had to leave early, as he was due at a City Council meeting in Revere. Before leaving, he told the boys that he was to report at Camp Lee, Va., to give instruction in the officers training school on January 5. As he left, he was given a hearty Tech cheer. The secretary read some of the letters received from men in the service and also the following night letter received from Jim Duffy, VI, from Buffalo, N. Y., the day of the dinner:

Happy New Year! Sorry I cannot be with you tonight, but I left Worcester to become assistant production manager of Curtiss Aeroplane. This aviation game is very poisonous—one drop is enough to kill you. If any of the boys are in Buffalo, tell them to look me up.

Still there with that old stuff, aren't you, Jim?—As a result of a discussion of unpaid class dues, it was the sense of the meeting that the payment of class dues be left optional with men in the service.—Conforming with the order of events at recent dinners, it was decided to have those men who had not previously done so tell the story of what they have been doing since leaving Tech.—H. M. Hallett, III, VI, started in with Fred T. Lye, contractor, at the Boston Arena when he left Tech. From there he worked for the New Haven Railroad for a while, then in Pittsburg four years with the Unit Construction Co. During a business depression he and his wife went to the latter's home in Chicago, and while there he affiliated himself with the Leonard Construction Co., for which concern he went to Canada on the erection of a large warehouse. Returning to the Hub early in 1917, he went into partnership with J. S. Grant, '12, forming the Hallett-Grant Construction Co., with offices at 136 Federal Street, Boston.—It certainly seemed good to see "L-C" Cooley, X, around these diggings again, he having come down from Toronto for the holidays. He started out from Tech with his fraternity brother, Ted Van Tassel, in the latter's tannery at Stoneham. Then he went with E. B. Badger & Sons, coppersmiths, in Boston. After a time with them he went with Cambria Steel in Pittsburg, engaged mostly on high-explosive work. He went "all over the lot" as he expressed it, on acetone extractions, landing in succession for his company in New York, New Jersey, Michigan, cross-country and north to Calgary and later to Quebec. Eventually he reached Ontario, where he is now in the establishment of British Acetones, Toronto, Ltd. He told in a most interesting way the nature of acetone extractions.—Art Coupal, II, has been with his father in the machine game ever since leaving Tech. He started with the Buffalo Shoe Co., using independent machines of their own, but found they couldn't buck the United Shoe Machinery Co., so he left them to go with the Crowninshield brokerage firm for a while. Then he and his father

joined forces in the machine line in Boston. They are working now on the production of continuous welding machines to make wire fence, and will follow this by building electric looms.—Another welcome "stranger" at the dinner was Don Stevens, who came on from Akron for the dinner. He prefaced his remarks with some very apt stories. He went right from Tech to Cleveland, where he joined the Peerless Motor Car Co., leaving after four and a half years, having attained the position of assistant superintendent. He then went to Akron, Ohio, to join forces with the Goodyear Tire & Rubber Co. as assistant to the factory manager. He was principally engaged in labor troubles, welfare work, etc., on this position and still carries this work on, although now he spends a good part of his time at the wonderful new balloon field of the Goodyear Company, where he is in charge of all activities. The company has contracted with the Navy to train men as balloonists. Don is in charge of the field, spending 70 per cent of his time there and the balance at the factory. There are one hundred men taking the course now and Don gave an interesting account of the work they do to qualify as balloonists.—Bill Pead, VI, started in the R.R. Signal department of the New York Central. Tiring of this, he tried efficiency engineering in a small cotton mill and then drifted into gas engineering. He joined the Lowell Gas Light Co. as assistant to the plant engineer. He has been with them four and a half years, and last October he was made superintendent of the plant.—Henry Dolliver, I, is one of the '11-ers who has been with the same company ever since leaving Tech, his company being the Aberthaw Construction Co. He has been on a number of construction jobs for them and is at present at Squantum, Mass., at work upon the huge destroyer plant. He started out on a large warehouse for the Larkin Co. in Buffalo, shifting from there to the Canadian side of Niagara Falls and finally to Philadelphia on Larkin jobs. Then he spent some time in Connecticut, building for the American Brass Co., and later was active in the building of a paper mill and sulphite plant for the S. D. Warren Co. in Cumberland Mills, Maine. Then he went to Greenfield, Mass., on some buildings for the Pratt Co., toolmakers, and from there came to Squantum.—The third "stranger" in these parts was our old friend "Bog" Bogdasarian, IV, who was up from Pennsylvania for the holidays. In the summer of 1911 Bog joined the New England Structural Co. here and went back to Tech in the second term of 1912 to finish his course. Then he went with the American Bridge Co. as a draftsman and from them to the Lackawanna Bridge Co. until September, 1913. Ill health then caused him to take a year's rest at home, after which he was in charge of a residence construction in Brookline. He then was inspector of a refrigerating plant for the B. & A. R.R. for a while, and was for a short time with Stone & Webster in and about the Hub. He then went to Ohio with the Masseron Bridge Co., later aiding in the

erection of a shell shop for Babcock & Wilcox Co. in Barberton, Ohio. He is now with the Carnegie Steel Co. in Newcastle, Pennsylvania.—A. H. Kaufman, X, went from the 'stute to Haverstraw, N. Y., where he went into the chemical laboratory of the Garner Print Works. He soon took charge of the lab and remained with the company a year and a half. Then he went with Cheney Bros., silk manufacturers, at South Manchester, Conn., being in charge of their chemical laboratory for a year. From there he went to the Merrimack Mfg. Co. in Lowell, Mass., where he was head chemist for three years. He then resigned and took a trip to South America for his health. Having married a Chilean girl, it was natural that he and his wife should go to Chile. Returning from there, he took charge of the plant of the Columbia Textile Co. in Lowell. The plant manufactures khaki and heavy cotton goods.—The feature of the evening was saved until the last: "Sellie" Seligman's story of his recent trip to the Orient. He prefaced his tour story with his experiences since leaving Tech. He graduated in 1912, but retains affiliation with 1911. Being a Course III man, it was natural that he first went to Ray, Ariz., with the Ray Consolidated Copper Co. He returned in a short while to Boston, however, to be an instructor in the Physics Laboratory at Tech until June, 1913. He then joined forces with the X-Ray Equipment Co. of Boston, taking pictures and selling equipment. He then was for a short time with the Brookline Electric Co., contractors, selling lighting equipment, largely store and window work. In 1915 he joined the company he is now with, Hartmann Bros., Inc., of Boston, commission merchants handling raw materials. In March, 1917, he was sent by his firm on an extensive Oriental and Occidental tour to look over the foreign produce markets. Space does not allow a complete description of Sellie's wonderful trip and his equally wonderful experiences, but an outline of his tour will suffice to show the extent of it. He sailed from San Francisco and visited in turn Vancouver, Japan, China, Singapore, Java, Sumatra, back to Singapore, then to India and finally back home. In his own inimitable style he told a story that was highly interesting to his classmates.—Oberlin S. Clark, II, is now in Pawtucket, R. I., where he is with the Sayles Finishing Plants in the engineering department. This is the same concern that E. J. Batty, II, is with.—F. C. Harrington, I, wrote that he would be back in Boston for Christmas Day only, and therefore could not attend the dinner. He is now in Metuchen, N. J., as chief draftsman for the constructing quartermaster of the Puritan River Ordnance Depot.—By the way, who do you suppose tapped the secretary on the shoulder in Boston the day before Christmas? Our old friend "Skip" (C. H.) Harrington, I, who was over from New York for the holiday. He promised to write, but hasn't yet.—T. S. Killion, III, is back, home from Shanghai, where he has been in the interests of the Standard Oil

Co. He does not know just where the company may send him next.—In a recent visit to Camp Devens, Art Leary says he saw a chap named Cory (M. M. Cory, I) in an officer's uniform. Does anybody know in what branch he is serving?—Franklin Osborn, III, wanted to attend the dinner, but found he could be home for Christmas Day only. As he said: "The Allies are shooting guns twenty-four hours a day, so we've got to supply raw material on that basis."—E. J. Whitcomb, XI, was commissioned a first lieutenant in the Ordnance Branch at the last Plattsburg, but is as yet unassigned.—Roger Loud, VI, tried to attend the dinner but couldn't. He has attempted to enlist in the aviation service, but was thrown down on account of his weight, 211 being 11 pounds too much. Then he was later examined in the first draft, but was turned down because he could not read at any distance without his glasses. He says that incidentally he is "trying to swing three men's jobs at the Boston Edison," having been put in full charge of all industrial and domestic heating work. This phase of the business is large, indeed, now, as the company is cooking electrically for 2000 or more men at Commonwealth Pier and has nearly 1800 domestic ranges out, totalling over 11,000 kw. of load.—L. L. Baxter, IV, who was with the class for but one term of selective work in architecture, recently wrote to the secretary from Nashville, Tenn., saying he hopes sometime to be able to meet the 1911 boys at a reunion. He is a graduate of Vanderbilt University, but has kept in touch with Tech affairs by being a member for several years of the Technology Club of New York. He is at present president and treasurer of the Cumberland River Steamboat Co. of Nashville.—Bill Humphreville, VI, writes as follows from Houston, Texas:

That circular letter and the blotter are good—sure enough good—but the blotter hit me harder because I would have been No. 74 on there, except for my right ear—not that it is too large, or too small, or too floppy, but just mostly ornamental. Looking at the list of names on the 1911 Honor Roll ought to make any man glad to belong to a class of real Americans. It makes me want, all the more, to do my part in one way or other.

The business I am in, contracting, will not be rushing this next year, and I can teach some one to do most of what I am paid for, if I am fortunate enough to get a chance to be of any value to our United States. Did you ever see airplanes as thick as birds? That's the way they are at Ellington Field, buzzing around until they scare the chickens—egg-laying kind—to cover; and so crowded that they have to have their landings timed to keep from hitting each other.

A most welcome letter, Bill!—Our old friend, "Mike" Greenleaf, VI, properly yclept Kenneth, has come to time with the following from Detroit:

Not in the service yet, nor does the possibility seem other than remote at the present writing. Had Nature been a little more careful in molding me, I might now be sojourning in France with two silver bars as a start. It all came about through my erstwhile boss, now lieutenant-colonel in charge of a division assembling and repairing airplanes just back of the lines. Incidentally, while I was right up in the front row on the first draft, I failed to qualify for the same reason as above—a

mitral lesion, whatever that is, all of which leaves me pretty much out of it except as the ordinary individual may lend his moral and financial support.

I have had occasion to see Kes Barr more or less frequently the last six months. As you probably know, he has charge of a considerable portion of the buying for the Curtiss Aeroplane & Motor Corp., Buffalo. Kes looks fine, in spite of the arduous honors present conditions impose at Curtiss' and, as I understand it, is making it hot for any of the few left who would profit unduly in the Government's extremity.

Of the other 1911-ers, I see none except Minot Dennett and I see him nearly every day. Minot, or "Wal," as now known, is in business for himself here in Detroit—manufacturers' representative and doing very well indeed. However, while this part of the world attracted but few 1911 men, there are plenty from classes a year or two ahead of us—Jack Moses, Roger Hill, Don Williamson, to mention a few I see quite often.

Take care of yourself, Dennie—as well as of the dollar enclosed.

Still got the old stuff, eh Mike?—Not until the December, 1911, dinner did the secretary learn from Hal Jenks, VI, of the arrival of Evelyn Ruth Jenks on November 17, 1917. Hearty congratulations are in order and so voted, Hal!—Gee, Course VI is monopolizing the news about now, for here's another "VI" story from North Billerica, Mass. Mr. and Mrs. John R. Corson announce the engagement of their daughter Ethel May to Mr. Edgar L. Woodward of Waterboro. That's the boy, Ed, glad to hear it!—Shifting for the nonce to Course II, here's what emanated from Hampton, New York. Mr. and Mrs. Thaddeus De Witt Southworth announce the marriage of their niece, Miss Mary Eloise Durfee, to Lieut. Harold Stowell Lord, Engineer Reserve Corps, on Saturday, the 29th of December, 1917. The "At Home" card reads: "After the first of February, 1918, 17th Street N.W., Washington, D. C." Hearty congratulations to you both, Harold!—Imagine the surprise and delight of his classmates when lil' "Groucho" Fryer bobbed up at the Alumni dinner on the 12th. Yes, the same old Bert, dapper and debonair as ever. He said he left Gussie Barker in Phillie to keep the "International" going. Another "stranger" was "Stan" Hartshorn, who came down from Gardner, Mass. There were sixteen 1911 men at the dinner, as follows: Coupal, Cumings, Denison, Dolliver, Fryer, Haines, Hall, Hartshorn, Killion, Leary, Linehan, McManus, Meisel, Pead, Pepper and Whitcomb.—With a few more address changes, the postscript notes must be considered finished. Don't forget—
WRITE TO DENNIE!

1912

JOHN E. WHITTLESEY, *Secretary*, Walworth Co.,
South Boston, Mass.

The following men of 1912 are in service:

Richardson Ayres, 1st Lieut., C. A. C.—Harold B. Beebe.—
J. A. Boyer, Corp., 324th Infantry, Camp Jackson, S. C.—Charles H. Carpenter, 1st Lieut., Ordnance Department.—Charles F.

Goodrich, 1st Lieut., O. R. C.—Joseph E. Harrington, Co. B, 303d Infantry.—C. F. Higgins, 2d Lieut., 302d Infantry.—C. F. Hobson, Lieut., Def. Res. N. G.—O. W. Holmes, C. A. C.—Alfred F. Kenrick, Priv., Co. B, 101st Engrs., Am. E. F.—W. W. Lang, Priv., N. A.—W. H. Lange, 2d Lieut., 306th Regt.—G. Lynch, 1st Lieut., C. A. C.—William F. McKnight, 1st Lieut., Med. Res. Corps.—Karl McKenney, Capt., C. A. C.—E. M. Marshall, 2d Lieut., Ord. Repair Shop.—Edward C. Mayers, Q. M. C.—Hamilton Merrill, 1st Lieut., San. Corps.—Henry M. Otis, 2d Cl. Seaman, Navy Avia. Detach., N. R.—Oliver D. Powell, Priv., Bat. F, 309th F. A.—G. S. Sawyer, Sergt., Co. A, 504th Engrs.—Stewart J. Schofield, Lieut., Canadian Regt.—Alfred N. Smith, Co. C, 302d Mach. Gun Bat.—Robert H. Woods, Jr., 1st Lieut., Ord. Dept., U. S. R.

1913.

F. D. MURDOCK, *Secretary*, 483 Crescent Avenue, Buffalo, N. Y.
ARTHUR W. KENNY, *Associate Secretary*, 3511 Lowell Street,
Washington, D. C.

The secretary acknowledges with pleasure the receipt of some nice letters in appreciation of the reprint of the July notes, which was sent to every man in the class. These notes were not as complete as they might have been. At this time we are particularly anxious to get every bit of news possible, in order that it may be made permanent record. The information will be of value in connection with the "Five Year Book," which we originally intended to publish in 1918, but which will now be held up until the close of the war for obvious reasons.

These are hard times indeed for lovers, and only a few marriages have come to our notice: Edgar Menderson (II), married Malinie H. Frienberg of Detroit on the 26th of November; Harold S. Crocker (I) and Miss Sallie Terry were married on October 30. Arnold P. Sturtevant (Sp.) was married on October 27 to Miss Dorothy B. Dunkle. The unmarried portion of the class seems to have lost its nerve suddenly in the last month, for we have no notices of engagements.

Mr. and Mrs. John A. Rockfellow announce the marriage of their daughter Julia to Mr. Allan G. Waite, lieutenant of Signal Reserve Corps, on Wednesday, the 12th of December, 1917, Tucson, Ariz.

Ed. B. Germain (II) is general manager of the Bethlehem Shipbuilding Corporation.

Quite a few fellows have entered the service since our last letter was sent out.—Walter Meuther (I) is connected with the aviation service at Assington, Pa.—J. P. Pohle is lieutenant of the 101st Engineers, now in France.—Elliott Gage (XI) is second lieutenant

at Camp Upton.—J. E. McDonald is a first lieutenant of the U. S. Engineers, in France.—Bob Nichols (I) is chief sanitary inspector of the Navy, stationed at Washington.—Sam Rogers (II) is a private at Camp Devens.—Warren Gentler is a provisional first lieutenant, C. A. C.—Donald Giles is second lieutenant Company F, Infantry.—Albert Goodnough is machinist mate, U. S. N. R. F.—A. W. Greely (I) is a captain in the Signaling Corps.—Leo Hartnett is first-class sergeant in the Aviation Section of the Signaling Corps.—C. F. Cairns is in the Naval Industrial Reserve.—H. N. Carlson is in charge of the Signal and Radio Department.—T. Davis is first lieutenant Ordnance, Inspection Section.—H. W. Dew is second lieutenant Q. M. C. N. A.—H. Elwell is sergeant, Company H, 302d Infantry.—G. W. Forester is a private in the 304th Engineers Corps, N. A.—Gardner Alden is a captain, Q. M. O. R. C.—J. Balsch, Jr., is a private, Brigade Headquarters Detached 51st Brigade.—A. E. Bellis is a captain of Ordnance.—Lee Bowman is a corporal, 301st Engineers Company E, N. A.—R. F. Braley is first lieutenant officer in charge E. O. R. C.—P. T. Burly is in Company L, 301st Infantry in the N. A.—Tom Byrne is a first lieutenant of construction, O. R. C.—Austin Wardwell is with the New York Naval Reserve.—Alan Brewer (III) is now mechanical engineer with the American International Shipbuilding Corporation. His work is on the design of a Class A 7500-ton cargo carrier, of which the Government is to build 50 next year. He writes:

It is a vast job and we employ an army of men of all kinds. The ship design is all done at our Camden office while the plant and executive offices are located in Philadelphia. After many unsuccessful attempts to enter the uniform service of the Government, it is very encouraging to be able to help, even in my small capacity, in such a vast undertaking as our shipping board has planned. I recently had a number of technical articles published by "Engineering and Contracting" and "Industrial Management." All of these papers were bearing on valuation work in some special department. "Industrial Management" published my last article, "A Comparison of Appraisal Methods," in the November, 1917, issue. I have also a junior paper under consideration by the same society of mechanical engineers.

Alan is a man after the secretary's heart—if the class produced a few more men of his type, our notes might not be suspected of being dry. His industry in the writing line speaks for itself.—Walter Brown (II) has been transferred to the Philadelphia Branch of the H. W. Johns-Manville Co., and he is a special salesman in the Power Specialties Department.—George Taylor is an instructor in the Machine Gun Company at the Springfield Armory.

Tom Lough writes from Bismarck, N. D., as follows:

I was mighty glad to get the reprint of the Class Notes in the July TECHNOLOGY REVIEW, and noted with much interest the doings of '13. I have accepted a commission as first lieutenant in the Engineer Officers Reserve Corps, but have not yet been assigned to active service. My training will take place probably at Fort

Leavenworth. Until called, I shall continue as field engineer with the North Dakota State Highway Commission, devoting my time entirely to federal aid roads. Please note my new address: Bismarck, N. D., care State Engineer.

Alfred Katz (II) is another public-spirited fellow. He writes:

The receipt of a reprint of the Class of Thirteen news from the TECHNOLOGY REVIEW has aroused me sufficiently to write you to the effect that I have given up my work of factory inspection for the State Board of Labor and Industries, after four years' service. My present work is in the same field of activity, only for private interests. I am bearing up well under the title of Safety Engineer for the Ludlow Mfg. Associates, Ludlow, Mass., the largest jute mill in the world. Looking out for the safety of almost three thousand employees in eleven mills is my interesting job. The telling of my story concludes with the significant remark that I am as yet unmarried.

Si Champlin is getting to be the class wit, and this is no joke. We quote from his letter as follows:

I have enjoyed reading over the reprint from the REVIEW. Where are all the Course V men? They must be too busy to remember their old friends; like to hear about them once in a while. I saw Fred Lane this summer. He was coming over to see us, but failed to make a date. He is working for a Ph.D. at Yale. He will probably find less responsibility attached to that degree than some of us have found with the degree of Pa.

We submit it to the class if this last pun of Si's is not actually funny.

L. S. Becker is a first lieutenant C. A. C. U. S. R.

Morris Levi (I) is still in the Coast Survey stationed at Manila. The Civil Engineers of the Coast Survey have recently been commissioned by the president. Morris performs the duties of junior hydraulic and geodetic engineer. He is subject to transfer into the Army or Navy as commissioned officer, and expects to be called at any time, as several of his co-workers have been ordered out already. Dick Cross had hoped to go to South America this winter in the interests of the Aluminum Company of South America, but the war upset his plans, and he now has a commission in the Coast Artillery Corps.

It is with sincere sorrow that we record the death of two classmates: Samuel F. Bogran and Harold F. Johnston—the latter died in May.

Ralph Rankin, VI, G. Cahill and J. Fallon took the course at the Institute for cadets of the Naval Flying Corps. Rankin has a commission as lieutenant in the United States Navy. Cahill and Fallon are taking a course of instruction at the Curtis Aeroplane Plants, the former stationed at Buffalo; the latter, at Hammondsport, N. J.

Al Gibson wrote the following breezy note from Oakland, Cal., where he is secretary-treasurer of the Lawrence Warehouse Company:

Have been meaning to drop you a line for a long time, as I know how you always look forward to getting my frequent letters. Have nothing unusual to report. Like everybody else, I have gotten into the spirit of war and have joined the Navy as a Seaman, second class. I will be called in a little while, and go to San Pedro, Cal.,

for training, and if I am bright enough I may pass an exam and get to be some kind of a straw boss. Our business has been extremely good, and I am enjoying my life to the utmost, and it took a little while for me to make up my mind, but since making it up I am very anxious to get in the swim. Expect to work the bull about a college diploma to the limit, and understand that Boston Tech graduates are regarded by Army and Navy people as something "holier than thou." Here is hoping it works out in real practice in my case. Am carrying around a German hunting license and hope to look like a jolly tar very soon.

Change of Addresses.

Geoffrey M. Rollason, Barre, Vt.—William S. Black, 32 Addison Street, Arlington, Mass.—Alfred Katz, P. O. Box 1865, Ludlow, Mass.—A. Laurence Brown, 109 Peterborough Street, Boston, Mass.—Phillip V. Burt, 602 Webster Street, Needham, Mass.—Paul J. Franklin, 96 Dedham Avenue, Needham, Mass.—Winfred S. Boynton, Park Street, Pepperell, Mass.—Ralph T. Alger, 1769 East 89th Street, Cleveland, Ohio.—John B. Welch, 364 Whaley Avenue, New Haven, Conn.—George A. Richter, 1724 T Street, Washington, D. C.—Ralph S. Rankin, Glen Road, Wellesley Farms, Mass.—Thomas J. Lough, care State Engineer, Bismarck, N. D.—Ralph B. Kennard, care National Abrasive Co., Hamilton, Ontario, Canada.—Gardner R. Alden, 12 Oliver Street, Framingham, Mass.—Private Volant V. Ballard, care 18th Engineers, Camp American University, Washington, D. C.—Walter E. Brown, 357 West Duval Street, Germantown, Philadelphia, Pa.—Guy H. Buchanan, 140 Parker Road, Elizabeth, N. J.—Jos. M. Isenberg, 12 Fuller Street, Brookline, Mass.—J. Warren Lovell, 20 Summer Street, Pawtucket, R. I.—Ward C. Lovell, Bowker Chemical Co., Elizabeth, N. J.—Victor Mayper, 135 Broadway, New York City.—Frederick D. Murdock, 483 Crescent Avenue, Buffalo, N. Y.—Robert B. Nichols, University Club, Washington, D. C.—Albert L. Pashek, 658 Prospect Avenue, Newark, N. J.

1914

C. J. CALLAHAN, *Secretary, 14 Prospect Avenue, Lawrence, Mass.*

ELMER E. DAWSON, JR., *Assistant Secretary,
28 Washington Avenue, Winthrop, Mass.*

Chauncy D. Bryant of 189 Bellevue Street, Newton, is the first enlisted man from the Newtons to die in France. His parents received word from the war department of his death from pneumonia somewhere on French soil.

Bryant was a member of the 101st Engineers, formed from the First Corps Cadets of this city, and was 26 years of age. He was a graduate, in the Class of 1914, of Tech, and before entering the service was a sanitary engineer with the Boston firm of Weston & Sampson. He leaves a brother and two sisters, besides his parents.

Before moving to Newton he was a resident of Chicopee and his early education was secured there.

The engagement is announced of Roy Linwood Parsell of Boston, and Miss Marjorie Archer Catlin, Vassar, 1916.—Of James S. Churchill of Pennsylvania and Miss Ednah G. Rhodes.—Of Gordon Rogers Jameson of Wollaston to Miss Christine Wheeler of St. Paul.—Alden Waitt has recently been married to Miss Kathryn Trapp.

The following men of the class are in service:

H. W. Barker, 1st Lieut., O. R. C.—T. F. Comber, Jr., 25th Engrs., Camp Devens.—Lucian W. Burnham, 1st Lieut., Advance Base Searchlight C.—P. M. Currier, Priv., N. A.—Donald Ritson Dixon, 2d Lieut., C. A. C., Am. E. F.—C. E. Doud, 1st Lieut. Ord. Dept.—T. J. Duffield, 1st. Lieut., Res. San. Corps, Camp Lee, Petersburg, Va.—Arthur Edgar Gerald Collins, Lieut., 461st.—R. Eksergian, 1st Lieut., Amer. Univ., E. T. C.—K. Everson, 1st Lieut., Mass. N. G.—C. G. Fallon, 1st Cl. Seaman, U. S. N. R. F., Aviation.—V. J. Gallene, Priv., Camp Devens, Mass.—Henry Laurence Gardner, 2d Cl. Seaman, U. S. N. R. F. Avia.—Alexander G. Gillespie, Lieut., C. A. C.—George W. Hard- ing, 1st Cl. Mach. Mate, U. S. N. R. F.—Herbert Hudson Hall, 1st Lieut., C. A. C.—E. D. Hayward, Sergt., Med. Corps, Hospit. Constr.—J. Willis Hines, Avia. Sect., Nav. Res.—Gilbert M. Ireland, English Army.—James Issacs, 2d Lieut., E. O. R. C.—F. P. Karns, Co. C, 15th Regt., E. O. R. C.—Harold W. Leather, 1st Lieut., Ord. Dept.—Merton B. Lewis, 1st Cl. Priv., Co. A, 14th Ry. Engrs. Corps.—Alexander G. Long, Jr., Prov. 2d Lieut., Engrs. C.—Eric W. Mason, 1st Lieut., B. Exped. F., died of wound August 12, 1917.—Fred D. Mendenhall, Corp., 7th Regt., Engrs. C.—M. V. Moore, in service.—Earl M. Newlin, 1st Lieut., 312th Mach. Gun Bat.—George L. McKay, E. O. R. C.—Norman D. Mac- Leod, Capt., Adj., 103d Regt., 6th F. A.—Robt. Parsons, Priv., N. A.—Richard W. Peatross, Jr., Capt., Ord. Dept., U. S. R.—Philip S. Platt, Capt., San. C., in France.—Ernest S. Shurtleff, Radio Gunner.—W. A. Snow, Capt., 1st Off., F. A., Fort Benjamin Harrison, Ind.—Edward Steere, Canadian Royal Horse Artillery.—Allan E. Stewart, Capt., Signals, Can. H. A.—John H. Stone, Priv., Amb. Corps, Sect. 511.—Winthrop G. Thomas, Corp., Sig. Corps.—Irving T. Thornton, Lieut., Infantry.—Howard W. Treat, 1st Lieut., Avia. Corps.

1915

WILLIAM B. SPENCER, *Secretary*,
544 North Grove Street, East Orange, N. J.

FRANCIS P. SCULLY, *Assistant Secretary*,
5 Exeter Park, Cambridge, Mass.

Your secretary had the pleasure of attending the wedding of Tom Huff, who was married on November 17, 1917, to Miss Aline

Lane, in Grace Episcopal Church, Plainfield, N. J. "Red" Waterman was best man. A reception followed at the home of the bride's parents, after which the newly-weds left for a short trip—destination unannounced. On their return they expected to make their home in Elizabeth, N. J., where Tom is employed by the Standard Aero Corporation.

"Red" Waterman was quite undecided about his future at the time. While Stone & Webster wanted to send him to France to work on cantonments, he was quite anxious to enlist in the Aviation Corps. We have not yet learned of his final decision.

Kem Deane, '16, also attended Tom Huff's wedding and helped to furnish that touch of the military without which no event of today is complete. Kem is in the Aviation Corps and expected to sail within two weeks to obtain his flying experience behind the lines.

The announcement of the engagement of Miss Catherine Emma Jackson, daughter of Prof. and Mrs. Dugald C. Jackson, to Philip L. Alger, is especially interesting to the men of Course VI. Miss Jackson graduated from Radcliffe in 1915 and has been much interested in social welfare work around Boston. We are glad that she has been persuaded to favor a member of 1915 with a little social uplift. Pass it on, Phil. "Phil" is carrying on ballistic research at Sandy Hook proving grounds for the United States Army. He was research assistant for two years in the Electrical Department at Tech. His father, the late Capt. P. R. Alger of the United States Navy, was professor in the Naval Academy, head of the department of mechanics, and was a noted expert in ballistics.

Paul Connor and Miss Hilda Cunningham, daughter of the late Edward Cunningham, of Edge Hill Road, Milton, were married October 11, 1917. They will reside in Milton.

James A. Tobey, our lusty cheer leader, has sent us the announcement of his engagement to Miss Lena May King of New York. Jim had the kindness to call on us while he was health officer of West Orange, N. J. At present he is chief sanitary inspector with the Bureau of Sanitary Service of the American Red Cross, now stationed at Louisville, Ky.

A clipping from the Cleveland, Ohio, *News* tells of the engagement of Miss Edith Brett, daughter of Mr. and Mrs. W. H. Brett, to Lieut. Ralph A. Spengler. Spengler is now stationed with the Ordnance Corps at Watertown, Mass.

Under the heading "Radcliffe girls fall victims of Cupid's wiles," we find the engagement of Pauline Baldwin, '17, of Louisville, Ky., to T. A. D. Fessenden. "Tad," have you been masquerading as Cupid through the sacred corridors of Radcliffe?

We are glad to hear from a few of the fellows in service for Uncle Sam.

D. H. McMurtrie writes from 1822 Fifteenth Street, N. W., Washington, D. C. He says,

"Allen Abrams and I have been among those recently commissioned in the Chemical Service Section, National Army, under Lieut.-Col. William H. Walker."

He was glad to be let out of signing a pledge, as the military outfit had relieved him of all his funds.

Stanley H. Osborne has generously opened up with the news which follows:

I and a few others mentioned below, about whose activities I have kept in touch, were members of the Harvard-Technology School for Health Officers and as such were listed as of the class at Tech of 1915. Albert F. Cornelius, M.D., C. P. H., served as sanitary inspector in the American Red Cross Sanitary Commission to Serbia in 1915. Served as a surgeon in the Lady Paget Hospital in Skoplje, Serbia, from October, 1915, to February, 1916. He then returned to his home in Berea, Ky., and I believe was medical director of Berea College, but am not sure. He is at present with the United States Public Health Service, doing extra cantonment health work at Newport News, Va., and his address is Box 613, Newport News, Va.

Harold H. Mitchell, M.D., C. P. H., served as sanitary inspector in the American Red Cross Sanitary Commission to Serbia in 1915-16. Returning to this country, he completed his course at Tech, and I am not sure whether he is listed at Tech as a 1915 or a '16 man. At any rate, he got his degree, the C. P. H., and then went out to Indianapolis as Epidemiologist of the Indiana State Board of Health. Last summer, about July, he received his commission in the M. O. R. C., a first lieutenant, and trained at Fort Benjamin Harrison, from whence he has gone to some unknown destination in November, 1917.

Ralph W. Mendelson, M.D., started with us in the C. P. H. Course in 1914, but left before receiving his degree. On sailing in the above-mentioned Commission to Serbia, he turned up on the ship and served in Serbia until November, 1915, when he retreated with the Serbs, as did Mitchell. Mendy landed in Italy and returned to his home in La Junta, Col., in March, 1916. He had previously been a medical officer in the United States Navy and was soon detailed to do public health work in Siam, where he was at Bangkok, Siam, when last I heard from him in September, 1916.

As for myself, I was a member of the American Red Cross Commission to Serbia with the above chaps, serving until October 22, 1915, with the Serbs and thence until December 15, 1915, in Serbia while the Bulgars were in control. During the latter two months, Cornelius was in Skoplje, the same town, so Tech was well represented.

Also a Charles E. Fox, a Tech man, but he must have been in a class between 1910 and '13, a sanitary engineer.

In December, 1915, I left the Bulgars and came home, seeing a bit of Bulgaria, Roumania, Austria, Switzerland and France on the way back. On arriving back, I took up my work as State District Health Officer in the Massachusetts Department of Health and in January, 1917, was appointed Epidemiologist of the department where I now am, in Boston.

On October 15, 1917, I received my commission as first lieutenant in the M. O. R. C. and have been awaiting orders ever since, but none have come, but expect them any day.

By the way, I have lost my Tech Directory (F. Osborn, '11), my big brother having stolen it, but the following individual is now in France, and undoubtedly his secretary would be glad to know it.

W. W. Walcott, M.D., B.S. (M. I. T.), was a State District Health Officer in the Massachusetts State Department of Health. He is now a first lieutenant in the Medical Corps, serving with the 101st United States Engineers, American Expeditionary Forces in France. He was formerly a member of the First Corps Cadets in the Columbus Avenue Armory, Boston, which was incorporated into the 101st

United States Engineers. I do not know his class, but Billy is about thirty-eight years old.

Oh, yes, Mendelson and Cornelius are both married, doing the trick in 1916 and 1917, but the Lord only knows who the girls were, I have forgotten.

Your assistant secretary, who enlisted in the Naval Aviation Detachment at Tech, is located for a while in Buffalo. He writes:

I am stationed at the —— Street plant of the company, where the gas tanks and propellers are being made. In addition some work is in progress on the blimps and on flying boats, but my particular job will be propellers, their manufacture and design, so I see where I will brush the dust off my freshman math. I am still only a second-class seaman, but expect to receive at least an ensign's commission shortly.

Frank's address is Hotel Graystone, Buffalo, N. Y.

Mrs. C. O. Norton of Kearney, Neb., mother of Oliver G. Norton, has kindly sent us a *Kearney Daily Hub*, in which we find that Oliver G. has been commissioned first lieutenant in the Signal Officers Reserve Corps, Aviation Section, of the American Forces in France. Last June he was sent to France as a member of the Aeroplane Production and Construction Commission, being stationed in Paris the last six months.

Mrs. W. L. Bascom of 109 Wales Street, North Abington, Mass., has kindly sent us a letter saying that her son Edgar D. Bascom is already with the colors and across the water. He is in Company F, 101st Regiment U. S. Engineers, American Expeditionary Force. This was formerly the First Corps of Cadets of Boston.

We have recently heard that the following men are in active war work or active service:

G. N. Althouse, Second Lieutenant, Infantry (unassigned). W. Brackett, Corporal, Camp Devens. T. G. Brown, Sergeant, Q. M. C., Fort Strong, Boston Harbor. N. L. Foster, Second Lieutenant, Battery B, 301st Field Artillery, Camp Devens. H. E. Hadley, First Lieutenant, 101st Engineers, 26th Division, American Expeditionary Force. R. R. Malcom, Corporal, Battery F, 105th Field Artillery, U. S. A., Camp Wadsworth, Spartanburg. S. C. F. E. Parsons, Ambulance Corps, now in France. R. F. Pollard, Canadian Explosives, Ltd., Nobel, Ontario. L. W. Prescott, Cadet, Royal Flying Corps, Canada. P. H. Taylor, First Lieutenant, Ordnance Department. R. H. Walcott, Canadian Explosives, Ltd., Beloeil, Que. J. B. Wirt, Lieutenant, U. S. A., located at Fort Leavenworth, Kansas. C. H. Calder, Private, N. A. Ambulance Section 540. S. E. Clark, Second Class Seaman, U. S. N. R. F. C. G. H. Collins, First Lieutenant, Engineers, Company F, 101st Reg. 26th Division. N. T. Ashkins, First Lieutenant Engineers, stationed in Paris at the A. E. F. Headquarters. E. F. Conway, Sergeant, First Class, Q. M. C., N. A. D. DeFremery, Mach. Mate, Naval Reserve. R. O. Delano, Sergeant in 301st Engineers Corps, N. A. M. J. Dodd, Private in Signal Reserve Corps. C. E. Ellicott, First Lieutenant, Company F, 105th E. O. R. C. J. B. Franks, Jr., Prov. Capt., Trans. of

U. S. A. B. Ball, Mechanic, Aviation Section. F. E. Bloomquist, Private, Infantry N. A. R. G. Brown, Sergeant, 101st Field Artillery Band. H. C. Buck, Second Class Seaman, U. S. N. R. William Tallman, Ensign, Bath Beach, Brooklyn.

1916.

RUSSELL H. WHITE, *Alumni Council Representative,*
4 Ames Street, Cambridge, Mass.

The Class of 1916 is leading the classes as usual. The biggest class to graduate from the Institute, the liveliest class while in the Institute, and now (and what can be more glorious?) we hold the record of men in the service.

Figures tell the story:

Number of men in the service, 173.

Number of men who have received commissions in Army or Navy, 124.

Mind you, these figures tell only an incomplete story. Fully 400 men in our class have not been heard from.

Bill Farthing, president, has not been heard from as yet.

Jimmie Evans, secretary-treasurer, is an ensign in the Naval Aviation Service and is located in Washington. Upon enlistment, he turned his class secretarial duties over to Don. Webster, assistant secretary-treasurer.

Don. Webster is a Prov. 1st lieutenant C. A. C., and is stationed for training at Fortress Monroe, Va. He is living, while there, at the Hotel Chamberlain. When Don. left for training, he turned over the secretarial work, on the first of December, to me with the words, "Rusty, I don't see but what you are the only one of the permanent board of 1916 who can be counted upon as a permanent fixture over here during the war, so go to it and keep the war records of our class till we all come home!"

I, like Jim Evans, am in the Naval Aviation Service, and am stationed at M. I. T. in charge of instruction in navigation in the Ground School for the Naval Flyers. That is why I am a permanent fixture for a while at least.

ATTENTION, 1916.

Send all news relative to our class to

Russell H. White,
4 Ames Street, Cambridge, Mass.

Due to the rapid turnover of the secretaries, our 1916 letter in the November REVIEW was missing. The Permanent Governing Board apologizes for this omission, and will see that it does not occur again.

During the month of December the 1916 file was put in shape

for its war work. A card has been made out for every one of our 820 members, and all correspondence has been entered in brief on the cards. Whenever a classmate goes into the service, a blue metal tab is put on his card. When he is commissioned, the blue is replaced by a red tab, so at any time we have at a glance the number of classmates in the service and a list of those who are officers.

A circular letter was mailed on December 26, 1917, to all members of the class who had not been heard from. Also a circular letter was sent to all members of the class calling for subscriptions to our M. I. T. relief work. It is a straightforward call to all of our class who are not in the service, to aid those of us who are in the service. The M. I. T. Auxiliary is making life livable for our classmates in France through the American University Club of Paris; and the support of this club IS UP TO US! The women of Technology are devoting their time and effort to this work, and it is up to us Alumni to back it. Let's make this another high spot in 1916 doing!!

In the next REVIEW will appear the complete honor roll of our class, compiled from data now on hand, plus the returns from the circular letter.

Class notes of men who are not in the service will also be published in the next REVIEW.

Engagements announced:

Archer Burbank to Miss Helen C. Small.

David L. Patten to Miss Beatrice L. Allen of 1925 Commonwealth Avenue.

W. Joseph Littlefield to Miss Sally Damon of Newton, Mass.

Emmons Blaine to Miss Eleanor Gooding of Portsmouth, N. H.

Marriages:

Raymond M. Stowell and Miss Louise Coggeshall.

James A. Tobey and Miss Lena M. King.

Olen C. Norris and Miss Helene E. Young.

Classmates, we have a right to be proud of our Honor Roll. There are few classes from any institution offering so many commissioned officers in the Army and Navy as our class is now doing. Let every sixteener remember this fact:

That what you do in this war will never go unsung! The time is coming when 1916 is going to get together; and then's the time when the deeds of heraldry will be read from our files and friends' names will be stamped immortal on our minds.

1917.

WALTER L. MEDDING, *Secretary*,
318th Engrs., Vancouver Barracks, Washington, D. C.

ARTHUR E. KEATING, *Assistant Secretary*,
893 Seaview Avenue, Bridgeport, Conn.

There are several engagements to the credit of '17: Ensign Francis G. Conaty and Helen T. Broderick.—Walter Burroughs Strong, 2d Lieut. in the Coast Artillery Corps, and Miss Barbara Steele, a graduate of the Garland School for Home Making on Chestnut Street, and an enthusiastic settlement worker.—Francis O. L. Killorin, inspector of naval construction, and Miss Ellen Wheelwright Peckham.—Ensign Stanley Knox Cooper of Malden and Miss Elizabeth Sayward of Holland Road, Melrose.—Lieut. Lawrence Davis of Newton, Mass., and Miss Marion Potter Daggett.—Donald Osborne Friend, at present engaged in government research on metals for munitions at Waterbury, Conn., and Miss Anna Hammond Burdett, Wellesley, '16.

Richard T. Whitney and Miss Ruth S. Potter were married November 17.—On December 20 Jacob Story and Miss Doris S. Norwood were married.

The class has a long list of men in service:

Charles A. Abels, Balloon Div., Avia. S. Sig. Corps.—A. K. Althouse, Industrial Reserve.—Chester E. L. Ames, 2d Lieut., C. A. C., U. S. A., 26th Co., Dep. Brig.—W. M. Angas, Asst. Civil Engr., with the rank of Lieut. (Jr. Gr.)—C. M. Black, Lieut., C. A. C.—M. C. Brock, Industrial Res.—E. P. Brooks, 1st Lieut., in military service abroad.—C. F. Brush, 1st Lieut., Ord. Dept., O. R. C.—F. H. Butterfield, Industrial Res.—A. C. Carlton, 2d Lieut., 3d Inf., U. S. A.—P. L. Carroll, Lieut., U. S. A.—Lawrence W. Barrett, Priv., Med. C., U. S. A.—Edwin F. Barry, C. A. C., U. S. A.—Paul J. Bertelsen, 2d Lieut., U. S. N.; left on transport for France October 18, last.—F. S. Carson, Corp., Canadian Engrs., Overseas Unit.—S. L. Chisholm, Co. E, 301st Inf., N. A.—Walter I. Clark, Lieut., C. A. C., U. S. A.—L. L. Clayton, 2d Lieut., C. A. C.—D. P. Daniels, Avia. Corps.—W. L. Dennen, Prov. 2d Lieut., Regt. A, C. A. C.—A. D. Dickson, 1st Lieut., Regt. A, C. A. C.—A. P. Dunham, Ord. Dept.—W. W. Eaton, 2d Lieut., in France.—H. P. Eddy, Naval Res.—R. C. Erb, Industrial Res.—P. Flagg, Priv., 304th Engrs. C., N. A.—J. P. Ferral, Jr., Prov. Lieut., C. A. C.—H. N. French, Ensign Naval Training School, Annapolis.—S. C. Cutler, Priv., 310th Inf., N. A.—H. B. Gardner, Capt., Virginia N. G.—J. A. Gargan, Prov. 2d Lieut., Marine C.—Thomas M. Gibbons, Priv., Co. K, 302d Inf.—Guy A. Gray, 2d Lieut., 301st Engrs.—T. E. Hannah, Prov. 1st Lieut., C. A. C.—J. H. Harper, 1st Sergt., Co. A, 301st Engrs.—H. W. Hamilton, 1st Lieut., Food Div., San. Corps.—Richard Hardwick, Co. 301st F. A., N. A.—C. W. Hawes, Industrial Service.—L. C. Hibbard, 2d

Lieut., Art. Res. C.—L. T. Hill, 2d Lieut., C. A. C.—F. C. Howard, Prov. 1st Lieut., U. S. Res. Ord. C.—F. S. Hubbard, Engrs. Corps.—Fernald E. Hulse, 1st Sergt., Co. E, 301st Inf., N. A.—D. F. Holden, 1st Lieut., C. A. C.—G. A. Hunt, 2d Lieut., C. A. C.—George P. Iggleheart, 2d Cl. Seaman, Naval Avia.—William T. Johnson, Jr., 2d Lieut., Inf., O. T. C.—H. N. Keen, Corp., Overseas Repair, Gas Def.—E. Y. Keesler, Prov. 1st Lieut., C. A. C.—A. R. Knight, 1st Lieut., now in Egypt.—J. R. Kelly, 1st Lieut., Sound Ranging, Sig. Corps.—F. S. Krug, Jr., 2d Lieut., C. A. C.—Kenneth M. Lane, Airplane Engr. Dept., U. S. Sig. C.—R. W. Logan, Prov. 1st Lieut., C. A. C.—R. Lowengard, Gov't Service at M. I. T.—R. T. Lyons, Light Art.—G. M. Lovejoy, Prov. 2d Lieut., C. A. C.—H. G. Mann, Industrial Service.—E. C. Matthews, Batt. F, 102d F. A., Am. Exped. Force, France.—C. G. Miller, 1st Lieut., Sig. C., M. I. T.—Irving B. McDaniels, Lieut. (Jr. Gr.), U. S. N.—W. A. Moore, 2d Lieut., U. S. A.—H. E. Morse, 2d Cl. Electr., U. S. N. R.—R. J. McLaughlin, 2d Lieut., C. A. C., O. R. C.—G. A. Nelson, Jr., 2d Lieut., C. A. C., Fort Monroe, Va.—W. I. McNeill, Industrial Service.—H. C. Neumann, U. S. N. R.—P. F. Nicholas, Priv., N. A.—L. I. Noyes, 2d Lieut., C. A. C.—T. F. O'Brien, Lieut., U. S. N.—E. B. Payne, Sergt., Mach. Gun Instr., Ord. Dept.—L. S. Phillips, Coxswain, U. S. N.—J. C. Platt, Jr., Capt., U. S. A., Vancouver Barracks.—C. E. Plummer, Co. 17, Mass. C. A.—W. L. Pryor, 1st Lieut., Ord. Dept., U. S. R.—E. D. Reynolds, Asst. U. S. Pub. Health Service, San. Comm.—K. C. Richmond, Ensign, U. S. N. R.—R. K. Robinson, U. S. N. R.—W. B. Ross, Co. 33, Amb. Corps.—H. M. Sandell, Co. D, Inf., N. A.—R. H. Scanell, Am. F. Amb.—F. S. Small, Prov. 1st Lieut., C. A. C.—J. J. Storrow, Jr., Chief Electr., U. S. N.—W. B. Strong, 2d Lieut., C. A. C., Fort Monroe, Va.—A. P. Sullivan, Recruit, 304th Inf. Headqtrs., N. A.—H. Sterner, Training at Fort Leavenworth.—W. L. Tapley, 2d Lieut., Ord. Dept.—D. G. Tarpley, Am. F. Amb.—H. S. Toole, Industrial Service.—K. B. Toye, Prov. 1st Lieut., C. A. C.—E. F. Twomey, San. Engr., Cantonment work.—N. E. Tourtellote, 1st Lieut., France.—A. R. Williams, 2d Lieut., Amer. Univ. Training Corps.—F. E. Williford, Capt., C. A. C.—W. C. Wood, 1st Lieut., Avia. S. Sig. Corps.